THE
BUSINESS QUARTERLY

What the Economics Graduate Can Expect Of the 1951 Employment Market

A Survey of Opinion
On Future Employment in
Canada For Grauduates in Economcis

Where and in what quantities do the opportunities for economists lie? What types of service do possible employers expect Economics graduates to render? How do these employers evaluate the Economics courses now being offered in Canada and what suggestions can they make for their improvement? The answers to these and several related questions a group of five students[1] in Economics at the University of Western Ontario undertook to find out.

With a gaze toward their prospects after graduation, the group began a survey in the summer of 1946. Questionnaires and a working definition of the term "economist" were prepared with the advice, and under the guidance of members of the Departments of Economics and Business Administration and several businessmen.[2] The results of the survey (which took several years to complete)[3] are herewith presented as they were originally written with an occasional qualifying "Editor's Note".

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[1]The preparation and mailing of questionnaires, interviewing, compilation and interpretation of the data were done jointly by James W. Johnston, John McCutcheon, John A. McNee, and the writers.

[2]The members of the Survey Committee are indebted to the University of Western Ontario, whose financial aid made the study possible, to Professors M. K. Inman, E. G. Pleva, E. E. Reilly, Fred Landon, C. C. Calder, W. A. Thompson, W. B. Harvey, E. J. Fox, and C. J. Bittner for encouragement and advice, and to the following men for help in preparing questionnaires and obtaining interviews: Messrs. C. R. Whitehead, Louis Pronovost, Paul Haynes, W. H. Tripp, D. B. Wallace, C. S. Carter, and K. R. Wilson, and to many others, not the least of whom were the congenial interviewees.

[3]*Editor's Note*: This report was completed before the publication of the American Economic Association's supplement on "The Teaching of Undergraduate Economics", *American Economic Review Supplement,* December, 1950. They both cover part of the same period.

The survey reports what individuals said when asked specific questions: since the response was only partial, all conclusions should be modified accordingly. In many cases the material may appear outdated. In many other cases, the survey merely lends empirical support to generally accepted concepts. From a historical standpoint and as an indication of trends it has value. But, to give it meaning for 1951, certain additional qualifications to the survey must be made.

In the first place, salary adjustments have taken place (though the inflation of late 1950 may have helped to make the real income of 1950 income receivers more closely approximate that of 1946-47). Secondly, the change which has taken place in the Canadian economy even since 1946 tends to emphasize the economist's role and probably means more openings for the Economics graduate in Canada. Commerce and finance have grown importantly. For example, many research divisions of government departments and private financial institutions have expanded to meet the needs of a new Canada.

Then, too, the problems facing Canada in the postwar period called for a greater emphasis on economic indicators based on national income accounting. The day has passed in Ottawa when anyone but a trained economist can operate effectively in a research section. In government the economist has come into his own as an economist. Finally, defence preparations have made economic problems second only to military problems, and hence have already led to a large demand for men with economic knowledge.

The economist will probably play a much more important role in the second half of "Canada's century" than he has in the first. It may well be a much more important role than even the investigation of a few years ago would suggest.

I. Introduction

What is an Economist?

It was decided that the minimum definition of the term "economist" should be *one who holds an Honour Degree in Economics from a University.*[4] Very quickly, however, it was realized that an exception to this definition would have to be made in the case of men who were then performing the functions of economists but whose training in the subject of economics was of an informal nature. They were, accordingly, included in the enumeration of economists employed. Nevertheless, in the evaluation of the future opportunities for economists the formal definition was adhered to, since private study and practice of economics cannot be compared precisely with formal courses in the subject.

Participants in the Survey

Three types of employers of economists were recognized in the preliminary stages of the survey; namely, business, government and the universities. An attempt was made to question a representative sample from each of these fields. This was relatively easy in the case of the governments and universities of Canada since names of ministers and

[4]An Honour Degree in Economics signifies a four-year university course, and graduation with an average of 66 per cent or better.

deputy-ministers in the case of the former, and of department heads in the case of the latter, are published.[5] Thus it was possible to canvass these two fields rather thoroughly.

In the business field it seemed desirable to have every phase of industry, commerce and finance represented, and in a manner which would be proportional to its importance in the Canadian economy. A cross section of corporations with at least average paid-up capital for the type was compiled from the Financial Post Information Service.[6]

Associations of businessmen were also contacted. In addition, several of the leading economists (including agricultural economists) in business, government and the universities were questioned.

Response to the Questionnaires

The overall percentage return of the questionnaire sent was 37.4 per cent. This was divided as shown in Table 1.

Table 1 — Coverage and Returns of Questionnaires

Business Field	*Number Questioned*	*Number Returned*	*Percentage Return*
Business Associations	4	2	50.0
Extractive Industry	42	21	50.0
Financial Institutions	50	8	16.0
Manufacturing Industry	169	52	30.8
Service Industry	90	14	15.6
Total	355	97	27.3
Government Field			
Dominion Departments	13	13	100.0
Provincial Departments	86	44	51.2
Total	99	57	57.6
Universities	16	10	62.5
Economists	18	15	83.3
Agricultural Economists	15	9	60.0
Grand Total	503	188	37.4

The questionnaires were presented in personal interviews with executives of the departments of the Dominion Government and of many of the largest firms having head offices in Ontario and Quebec.

[5] *Canadian Almanac* of current year.

[6] In making the business mailing list a figure was established for each main type of business (*i.e.*, extractive, manufacturing, financial and service) as the minimum paid-up capitalization necessary for a firm to be included in the mailing list. In each case the critical figure was the average paid-up capital, although in the case of the investment trusts, where paid-up capital is large compared to the service produced for the economy as a whole, the mailing list was confined to the upper one-quarter of the firms.

II. Fields of Employment of the Economist in Canada

Organizations replying to the questionnaire had 338 full-time economists in their employ. Some 117 of these were employed by the Dominion and provincial governments, about 116 by the universities and at least another 105 by business organizations.[7]

Economists in Government

The Dominion Government reported the employment of more economists than all of the reporting provincial governments taken together. Although all but four of the departments replying had economists on their staffs, Table 2 shows that the Dominion Bureau of Statistics was the most important employer, followed by the Departments of Reconstruction and Supply, Finance and the Wartime Prices and Trade Board.

Table 2 — Numbers of Economists Employed in Departments of Dominion Government, 1946[a]

Dominion Bureau of Statistics	30	Fisheries[b]	1+
Reconstruction and Supply	23	Labour	1+
Finance	12	Mines and Resources	1+
Wartime Prices and Trade Board	10	National Revenue	1+
Justice	6	Trade and Commerce	1+
External Affairs[b]	1+		

[a]The Departments of Mines and Resources, Public Health, Secretary of State, Transport, and the Civil Service Commission employed no economists.

[b]Those marked with the number 1+ stated that they employed economists, but did not specify the number.

The services performed by economists in the Dominion Government are largely of two kinds, administrative and research. The latter was found to be the more usual function in the various departments, and, of course, the specific nature of the work done pertained peculiarly to the department concerned. In the Department of Finance, however, economists made up one-half of the senior officers.

Thirty-three persons at the time of the survey were employed as economists with the provincial governments replying to the questionnaires.[8] Provincial Treasurers' Departments led in the number of economists employed, as shown in Table 3, but the unique Department of Cooperation and Cooperative Development of Saskatchewan was a close second. Duties were analagous to those performed by economists in the

[7]These totals come from replies to questions on questionnaires returned, but since the percentage return for business was much less than for government and universities, the figure of 105 economists employed is probably capable of considerable expansion.

[8]Many provincial government departments stated that they rely on the Dominion Government for economic counsel, particularly in respect to government finance.

Dominion Government. Two deputy-ministers and one assistant deputy-minister were economists.

Table 3 — Numbers of Economists Employed in Departments of Provincial Governments, 1946

Provincial Treasurer or Finance	8
Trade and Industry	7
Cooperation and Cooperative Development	7
Labour	5
Agriculture	3
Education	1
Municipal Affairs	1
Provincial Secretary	1
Total	33

Economists in Business

Of all business firms replying to the questionnaire, 39 per cent reported that they employed an economist, or someone performing his functions. The hundred-odd persons reported as performing the economist's function for the field of business were most numerous in manufacturing as shown in Table 4.

Table 4—Numbers and Functions of Economists in Business Organizations

	Type of Business					
Kind of Position Held	Manufact'g	Finance	Extractive	Service	Bus. Ass'n	*Totals*
Executive Positions						
Senior Executives[a]	18	3	1	2	....	24
Administrative Dept. Executives[b]	15	1	....	6	....	22
Operational Dept. Executives[c]	4	17	....	....	....	21
						67
Advisory Positions[d]	11	4	15	7	1	38
Totals	48	25	16	15	1	105

[a]Include president, executive vice-president, vice-president, secretary, assistant secretary, secretary-treasurer, treasurer, assistant treasurer, comptroller.

[b]Include accountant, internal auditor, cost operations manager, coordinator of employee relations, purchasing manager, industrial relations manager, personnel manager, public relations manager.

[c]Include sales manager, works manager, investment officer (insurance companies).

[d]Include economist, economic consultant, financial advisor, economic advisor to president, personal assistant to president, secretary to board chairman, executive assistant, municipal tax expert, tax lawyer, assistant comptroller of taxation, tax accountant, excise and customs expert, research supervisor, sales research assistant, sales analyst, statistician, manager expansion and planning, manager sales research and planning, manager business policy department.

The order of precedence, then, in the use of the economist's services in business has been (1) manufacturing, (2) financial institutions, (3) extractive industries, (4) service industries, and (5) business associations (a trailing fifth).

Function Performed

In business, the economist appears to be performing an administrative function more often than an advisory one according to Table 4. He is found, however, in an advisory capacity among all types of industries.[9]

The manufacturing field is noteworthy in Table 4 for the extent to which the economist's functions are vested in senior executives of the firms. This may mean simply that the work which the economist is especially suited to perform is done by senior executives in the ordinary course of their search for the kind of economic data they need for decisions of policy. On the other hand, it may imply a discovery on the part of some manufacturing firms that the viewpoint and training of a competent economist makes him eligible for positions of major administrative responsibility.

Firms in the extractive industries represent the other extreme. Most of that industry's economists perform an advisory function. Study of the titles held by economists in the industry shows a high proportion of "tax experts", extractive industries being the only group replying to the questionnaires which associates economists with this type of work. Apparently the services of the economist are of value in interpreting the effect on the firm's operations of the complicated system of taxes and subsidies which enmeshes the mining industry; in addition large size makes it practicable for certain firms to employ someone who concentrates on taxes in general.

Sizes of Firms Employing Economists

The relationship of size of firm to the employment of economists is shown in Table 5.

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[9]It is necessary to observe that a reclassification of the position, "investment officer", under which title Economics graduates worked for insurance companies, would transfer 16 from the category, "Operational Department Executives" to "Advisory Positions". Recognition of the fact that the investment officer, while he may be considered a department head, also performs an advisory function, enhances the relative importance of the advisory function in the total cross-section.

Table 5 — Sizes of Firms Employing Economists

Type of Industry	*Number Employing Economists in Each Size Group*											
	Unspecified Size	Under 2,000 Employees				2,000-10,000 Employees				Over 10,000	Total	%
Manufacturing	3	1	2	4	1	4	1	1	1	1	19	50
Service	1	1	1	1	....	1	....	....	....	3	8	21
Extractive	....	2	....	....	....	2	....	....	....	1	5	13
Financial	2	2	....	....	1	....	....	....	....	....	5	13
Business Ass'ns	....	1	....	....	....	....	....	....	....	....	1	3
		7	3	5	2	7	1	1	1			
Total	6	17				10				5	38	100

The only legitimate conclusion which may be drawn from this table is that economists are employed by all sizes of industry; the numbers involved are too small to enable other generalizations to be made. The relatively large number of economists employed by firms having fewer than 2000 employees, is accounted for by the fact that this size-group includes a large proportion of the total number of firms in the country. Any survey therefore might expect to receive a greater number of responses from this group than from any other.

Economists in Universities

Ten Canadian Universities replied to the questionnaire out of a total of 16 questioned; Table 6 indicates approximately the total number of people in Canada who gained a livelihood in 1946-47 from the teaching of Economics.

Table 6—Numbers and Ranks of Personnel in University Departments of Economics

	Full-time	*Part-time*
Professor	24	....
Visiting Professor	2	....
Associate Professor	9	....
Assistant Professor	12	1
Instructor	21	4
Lecturer	13	4
Assistant	35	1
Totals	116	10

Summary: Relative Importance of Business in Employment of Economists

Because of the ease of getting in touch with all government and university departments compared with the difficulty of canvassing the complete field of business it is likely that the number of economists now employed in the business field has been underestimated, and that the

business field is relatively more important in the employment of economists than government and the universities. This conclusion is endorsed by Table 7.

Table 7 — Placement of Economics Graduates of Canadian Universities
Aggregates for certain years in period 1930-46[a]

Field Entered	*Number*	*Percentage*
Business		
Manufacturing	27	15
Financial	24	13
Service	24	13
Extractive	6	4
	81	45
Chartered Accountancy[b]	37	20
Government	32	18
Teaching	15	8
Law	11	6
Others	5	3
Total	181	100
Post-graduate studies[c]	46	
Grand Total	227	

[a]This table is a composite of returns from the University of British Columbia for the period 1930-1946, from the Universities of Alberta and Western Ontario for the period 1940-46, and from the University of Toronto for the years 1940, 1941, and 1946. Accordingly, attention should be focused on the percentages rather than on the numbers.

[b]Only the University of Toronto reported the entering of the field of chartered accountancy by graduates in Economics.

[c]While post-graduate study was the field of activity which these Economics graduates entered upon leaving the institution where undergraduate studies were taken, this is recognized to be only an interim stage; their eventual means of livelihood was beyond the ken of the university replying and they have not been included in the percentage calculations.

Even though it may be necessary to rule out as a special kind of Economics graduate, those graduates of the University of Toronto who went on to study chartered accountancy, business still retains first importance as the type of activity entered into by the greatest number of Economics graduates in the past ten or fifteen years.

Manufacturing, the leading industrial group in the economy as a whole, appears to employ a greater number of economists than any of the other groups.

Financial institutions have second rank and service industries third in numbers of economists employed.

The contrast between university placements and the replies of the firms themselves in the case of the extractive industry, as shown in Tables 4 and 7 seeks explanation. It may mean that the training of the people who perform the functions of economists in the extractive industries was obtained, for the most part, elsewhere than in the four universities who reported placements. Similarly it is also possible that it was obtained at times other than those which their date covered, or, that the extractive firms, in replying, gave to the term "economist" a more liberal definition than was intended by those making the survey. Because of this, it seems best to assume that the extractive industry is the least important of the four groups of industry for the employment of economists.

Business, then, is first in the number of economists employed, and governments and the universities follow. Whether this situation is likely to continue or not is the topic of the next section.

III The Market for Graduates in Economics

Business

The real market for economists, as indicated by Table 8, probably lies with those businesses now employing economists rather than with those which have not as yet hired any.

Table 8—Future Demands, Related to Present Employment of Economists by Business Organizations

	Number intending to hire more economics graduates than presently employed	*Number not intending to hire more economics graduates*	*Undecided or no answer*	*Total*
Employ an economist at present	20	5	13	38
Do not employ an economist	5	25	29	59
Totals	25	30	42	97

Government

In the Dominion Government, four of the fourteen departments and agencies questioned foresaw an increased use of economic services in their department or agency. These were the Departments of Agriculture, Finance, Labour, Mines and Resources, and the Dominion Bureau of Statistics. The possibility is not, of course, ruled out that other depart-

ments which employ economists will continue to replenish their economic staffs. This part of the questionnaire was designed only to find the departments in which there would be an increase in the use of economists, as experience proved it impracticable to ask the actual number of economists to be employed.

Among the provincial governments, of a total of forty-four departments returning the questionnaire, nine, or 20%, expected that there would be an increase in the demand for economists in their department. Three of these were Departments of Industry and Industrial Development, two were Departments of Labour, and the other four were, respectively, Departments of Agriculture, Cooperation and Cooperative Development, Fisheries and Finance.

Universities

In the academic field the principal buyers of the economist's services are the Departments of Economics at the Universities, whose requirements are given by Table 9. There also exists the possibility that Economics may be more widely taught in high schools. Even, however, if all of the high schools in Canada offered Economics on their Curricula very few more economists as such would be engaged. Only the very largest secondary schools could afford a teacher who confined himself wholly to this subject. Teachers' colleges would provide the only other new field for full-time economists.

Table 9 — Number of Additional Economics Teachers Required by Canadian Universities, Fall, 1946

	Full-time	*Part-time*
Associate Professors	3	....
Assistant Professors	1	....
Instructors	....	3
Lecturers	4	....
Assistants	....	3
	8	6

Types of Economic Service Wanted

Most of the prospective buyers of the economist's services desired generally the same type of material in the product they bought, but others (for example, those who bought the services of agricultural economists) wanted a slightly different type. Great differences, on the other hand, existed among buyers as to the degree of finish wanted in the product. These differences were especially great in the business field, less in the government field, and least of all in the academic field.

In the business field, information gained from questionnaires and interviews demonstrated that most firms desired Economics graduates to

have the B.A. or B.Com. degree, and to obtain their advanced training on the job with the organization. A few, who had no facilities for training men for the type of duties they wished them to perform, wanted graduates with advanced degrees; that is, M.A., M.Com., or Ph.D. in Economics.

Table 10 — The Amount of Preference for Advanced Degrees

Type of Business	*Preferring Advanced Degrees*	*Not Preferring Advanced Degrees*	*Undecided or no answer*	*Total*
Manufacturing	7	14	30	51
Extractive	1	6	15	22
Service	2	5	7	14
Financial	1	3	4	8
Bus. Assoc'ns	....	....	2	2
Total	11	28	58	97

Table 10 shows that over 50% of all firms replying had no definite convictions on the matter, but among those who did, those not preferring advanced degrees outnumbered those preferring them by almost three to one. Moreover, no marked differences in preference are apparent from one type of business to another, except that extractive industry had a much weaker desire for advanced degrees.

In the Dominion Government the preference for advanced degrees is almost universal and salaries reflect that preference. Among provincial departments there is much less unanimity. Out of the total number of provincial governments replying over half were undecided or gave no answer to this question, slightly more than a fifth were in favour, and slightly less than a fifth were not in favour of granting preference to people holding advanced degrees.

In universities there was a decided preference for advanced degrees. The amount of salary preference given to advanced degrees was not clearly determined but it appears that the higher the degree, the more rapid the promotion, other things being equal.

Initial Salaries Paid to Economics Graduates

In the business field, the greatest range of salaries paid to Economics graduates revealed itself in the manufacturing group, whereas salaries averaged the highest in the service and extractive industry groups. The greater range in manufacturing may in part be explained by the greater number of questionnaires returned by this group.

Among manufacturing firms which answered the question on salaries the range extended from just below $150 to over $200 per

month.[10] The corresponding average salary paid to engineering graduates by the manufacturing group was about $180 per month.

Service industries were willing to pay starting salaries ranging from $175 to $190 per month. Engineering graduates here were paid starting salaries ranging from $175 to $225. In the extractive industries the range for Economics graduates was from $150 to $225. Here engineers' starting salaries were from $175 to $225 monthly.

Little information was furnished by the financial group, but the average seemed to be $150 monthly for starting graduates in Economics.

Provincial government departments paid an average rate of $150 monthly for a man with a B.A. in Economics. The Dominion Government was willing to pay a starting rate ranging from $150 to $240 per month, depending upon the department concerned and the type of degree held by the applicant.

The ranges of salaries for economists in the ten Canadian universities replying to the questionnaire were as follows:

Professors	$2500	to	$7000	per annum
Associate Professors	2300	to	5500	per annum
Assistant Professors	2000	to	4500	per annum
Lecturers	1500	to	3500	per annum
Instructors	1000	to	2000	per annum
Assistants	250	to	1000	per annum

In most cases, probably, positions would be open to people with the B.A. degree only in the three lowest teaching ranks and positions in ranks above that would be given to people with advanced degrees and/or with considerable experience. Consequently this group of salaries is not strictly comparable with those of the other fields, in which starting salaries only were dealt with.

This discussion of salaries should be qualified by three considerations. First, the above figures resulted from an attempt to sample the salary situation in late 1946 and early 1947. Since then costs of living have risen greatly and it seems reasonable that some change has been made in salaries paid since the questionnaires were returned. Second, no pronouncements are made concerning subsequent salaries. Although rapidity of salary advancement depends largely upon the individual, it also relates to the type of business and the size of the firm. Third, the smallness of the sample demands that the figures presented be used only as a very general guide.

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[10]Because of the policy of most firms to give recognition to individual capabilities in the setting of salaries, the questionnaire was phrased so that a likely range of salaries for different types of graduates might be given, rather than a definite figure for each, as the latter would have had to be arbitrary in most cases.

Numbers of Graduates Available

In the spring of 1947 there were at least 158 new graduates in Economics,[11] of whom 80 had been granted Bachelor's degrees, 74 Master's degrees and 4 Doctor's degrees. Not all of the Bachelors nor all the Masters offered their services immediately as some of them decided to pursue further their formal study of Economics and others planned to use their economic training as a background for other fields, such as law.

Summary: The Market in Action

At the time the questionnaires were returned there were in Canada at least forty-one new opportunities for university graduates in Economics, offering salaries of from $150 to $200 per month. Since (a) the number of economists each reporting firm would hire was unknown, and (b) there was only a partial response to this part of the questionnaire, it is impossible to state the demand in absolute terms.

IV Present Training and Its Improvement[12]

All questionnaires asked for an expression of opinion about the manner in which present training might be improved.[13] Here, the specific suggestions of potential employers and practising economists will be summarized and compared with the recommendations of those who actually do the teaching.

Recommendations of Potential Employers

Business

One view, at least, was common to all types of business questioned — the Economics curriculum should be more practical. The most frequently suggested means by which this could be achieved was summer work, or part-time work during senior years, by the student in his chosen

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[11]This number is deficient by the number of 1947 graduates of the Universities of British Columbia, Manitoba, Montreal and Laval, which did not reply to this part of the questionnaire.

[12]*Editor's Note*: The reader will find that the American Economic Association's Committee on the Undergraduate Teaching of Economics and the Training of Economists has reached conclusions which support substantially this survey's findings. See particularly, "Undergraduate Economics as Preparation for Careers in Government Service and in Business", Ben W. Lewis, Chairman, *American Economic Review Supplement,* December, 1950, pp. 125-138.
In another section of the Committee's report, J. M. Clark feels that Economics can make a contribution toward giving the student some sense of awareness of the situation his country is in, of the shifting relations between community and individual, and of the unsolved problems in "a world that is not finished, but becoming". See "Economic Means — to What Ends" *American Economic Review Supplement,* December, 1950, p. 50.

[13]Teaching economists were asked for recommendations which would lead to an increase in general capacity and efficiency of graduating students; business and government were invited to suggest improvements which would make the abilities of Economics graduates conform more closely to the requirements of the organizations concerned; practising economists and agricultural economists were asked for suggestions in training improvement which would better fit graduates for that economist's present line of work. Accordingly, the replies from the last two groups reflected, at least in part, the particular requirements of the person or organization replying, while the suggestions of the first group could be expected to be more general in scope.

field, for which credit might be given toward his degree. Other suggestions along this line were discussion groups with businessmen, professors, and students participating together, and the increased use of the case method in teaching.

Manufacturing firms, in addition to the recommendation for greater practicality in economic training, suggested the early mastery by the student of a good basic knowledge which would include History, English and Mathematics. Options, depending on the particular field of endeavour for which the student is preparing himself, could, according to the replies, be chosen from among Finance, Production Methods, Executive Training, Engineering and Marketing.

Service industries, in accord with manufacturers, suggested that the student should acquire a hard core of knowledge at the beginning of his economic education, which would consist of Mathematics, Statistics, English, Science and Accounting. Then he should round off his education, many replies stated, by choosing options appropriate to his ambitions from Economics, Corporate Finance, and Marketing.

The basic core of knowledge recommended by financial institutions would include Political, Economic and Monetary Theory, Accounting, and Mathematics. Actuarial Science was suggested as a suitable option for students needing it in their chosen field (for example, insurance).

From the extractive industries came the suggestion that Economics be divorced from Political Theory, and two replies stressed that willingness to work and general ability were more important than specific subjects studied.

Government

Statistical Theory and Methods and Econometrics, along with Economic Theory, were singled out by officials of Dominion government departments as deserving of more emphasis than at present in the training of economists. Initiative, accuracy and facility of expression were likewise recommended as essential parts of the economist's equipment; the latter suggestion was typified by one reply which commended for special emphasis "the ability to express oneself well in lucid, monosyllabic English or French."

According to a senior official in the Department of Finance, improvement in economic education should consist in: (1) the acquiring of more knowledge than at present about political reality and institutions, (2) general intellectual versatility rather than specialization, (3) increased attention to current economic problems in Canada and abroad, and (4) training in statistical sources as distinct from statistical methods.

Provincial government departments were notable in their replies for the close parallel between subjects recommended and the specific job of the department concerned. Departments of Agriculture suggested

intensified study of Farm Management, Marketing, Agricultural Economics, Rural Sociology, and the ability to carry on and direct research. Departments of Labour recommended courses in Industrial Relations, and Engineering, with the suggestion of post-graduate study in the economics of industry, including administration and labour problems. Study of Municipal Government was, naturally enough, the suggestion of the Departments of Municipal Affairs. Departments of Health and Public Welfare would, they said, regard as a desirable result of economic education such knowledge of social trends as would be an aid to the formulation of policy on public financial assistance.

The prerequisites of employment for Economics graduates in provincial Departments of Finance and Industrial Development were somewhat less specific. The former suggested substantial reading in Economics, as well as a working knowledge of Accounting, while the Department of Industrial Development resembled business firms and Dominion government departments in calling for training in clarity of expression and practical experience in the course of academic work, by cooperation in summer work between the university and industry.

Recommendations of Practising Economists

As to content of the course of study, practising economists suggested a central core including such subjects as English, Mathematics, Logic, Philosophy, Geography, History, and Economic and Statistical Theory. With these elements as a foundation, formal education, it was stated, might be completed by the study of courses in Law, Government, Public Administration, and the 'non-theoretical' Economics courses.

According to the economists replying, a major purpose of the course should be to inculcate analytical, questioning habits of thought, and clear, simple expression.

In order that professors might have more time to supervise the individual research of their students, one economist favored lighter teaching loads.

Agricultural economists, as a special variety of practising economists, recommended a core of subjects essentially similar, and including English, Mathematics, Economic and Statistical Theory, and Statistical Methods, but one agricultural economist advocated an undergraduate degree in Agriculture as a prerequisite to work in Agricultural Economics. The additional courses recommended were, Land Economics, Statistics, Transportation, International Trade, Public Administration, Marketing, Farm Credit, Farm Prices and Price Policies, and Farm Management.

Recommendations of Teaching Economists

The content of the course of training for the economist-to-be, should, according to university teachers of Economics, comprise, first of

all, a sound background in English, History, Philosophy and Mathematics. The course should then be built around Economic Theory, and the place of Economic Theory and Economic History in the larger field of the social sciences should be carefully explained. Only after this general background and study of theory, teachers contended, should the student take the "practical" courses such as Labour Problems. It was noted by those replying that the present tendency is for students to specialize too early in Economics.

One professor criticized the present accent on the Economics of Distribution, suggesting that Production Economics should be given relatively more attention than it is now. Another emphasized in his reply that business wants men who can do things, and stated that present courses stress too much the development of the critical faculties.

Teaching methods were also subject to recommendations by teachers of Economics. Small classes, less formal lecturing but more discussion, and more emphasis on the development of a way of looking at things, were the principal suggestions for improvement of methods.

Summary: A Composite Course and Its Teaching

From the numerous recommendations it is possible to select a few which were common to all, or most, of the groups making suggestions, and to set forth the minimum requirements for a *Composite Course in Economics* which would be generally acceptable.

Contents of Course

The study of English, as one subject in the central core of the economist's formal training, and/or the specific suggestion that the graduate have the ability to express himself clearly, had universal acceptance by both groups of prospective employers, professional and teaching economists. Mathematics was favoured almost as highly, and deserves second place.[14] Economic Theory, suggested by all groups, though not by all sections of the business field, would be another essential component of the course. History, also, was commended for a position in the central background by all groups except government departments.

These four subjects, English, Mathematics, Economic Theory, and History, were acknowledged to be of first importance in the economist's training, both by prospective employers and professional economists on the one hand, and by teachers of Economics on the other. For this part of the training, at least, the users of the services of Economics graduates had reasonable assurance that the graduates would answer to their employers' requirements.

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[14]Although Mathematics was not accorded this importance by governments, Econometrics, or the application of mathematical techniques to Economics, was suggested in Dominion government departments.

For the rest, teachers and prospective employers did not agree on the essentiality of subjects to be included in the central core of the economist's training. Statistical Theory and Methods, and Political Theory were recommended in replies both from business and government, and Philosophy in replies from practising economists and teachers, for inclusion in the basic background. It is probably true that these subjects are available to most university students of Economics, if not as basic subjects, at least as options; what is valuable to observe is the emphasis which prospective employers would ascribe to the two former in the total curriculum.

The remaining courses required to round out the economist's formal training depend for their selection on the career for which the student is preparing himself. Among the large number of specific courses suggested by particular groups of employers, and recorded on preceding pages, two, Accounting and Marketing, were recommended a greater number of times than any other.

Methods of Instruction

For improvement of methods of instruction of aspiring economists the most frequent suggestion by prospective employers was for practical experience in the course of academic training. Of the teaching economists replying, however, only one considered this an essential way of improving the course in Economics.

Generally speaking, to be in the most advantageous position for employment in business or government a student should decide on the field of his interest before starting his university career, and should choose the optional subjects and summer employment appropriate to this field. Such a course would well satisfy most businessmen. University teachers of Economics, although in agreement with businessmen as to essentials, differed with them in recommending more time spent on the liberal arts part of the course and less on specialization. Government officials were somewhere in between. They called for specialized training, particularly in provincial departments, and recognized it in higher initial salaries, but they gave more importance to the liberal arts than did businessmen.

Although a degree in Economics is helpful, businessmen and government officials agreed that it is the man who counts. If the work is done well, then the degree itself becomes less and less important. Initiative, accuracy, and general ability, for which there are no degrees, command the highest premiums.

V Conclusion

Business was found, by every measure, to precede government and the universities in employment of economists. Manufacturing predominates within the business field as the type of industry most favourable

to the use of economic services, giving employment, in late 1946 and early 1947, to the largest number of economists working in any industry, and having the greatest demand for new graduates in Economics.

Almost all, in fact 92 per cent, of those performing the functions of economists in the business field had received some training in Economics as part of their regular university course, but a relatively small number had specialized in the formal study of Economics. Only 8% of the economists did not hold a university degree.

Governments, in particular the Dominion government departments, were second to business in employment of graduates in Economics, but gave higher preference to advanced degrees than did the business field.

All groups questioned were agreed on a basic core of knowledge which should be acquired by the student in Economics, but groups differed as to the weight they would assign to it in the total course. University teachers of Economics ascribed most importance to the core of knowledge, government officials less, and businessmen least of all. In general, businessmen recommended early specialization and increased practical training. This difference in opinion is perhaps to be expected. The businessman, when hiring a university graduate, is required to be interested in the specific contribution the new employee can make toward the success of his particular firm; the university teacher of Economics is concerned to induce in the student an understanding of the economy in general.

—Allan J. Barker
—Gordon C. Dollar

The Rising Cost of Living: Its Causes

Erle A. Steiss
Manager, Investment Department
The Canada Trust Company and Huron & Erie Mortgage Corporation

In the course of looking at the factors which, over the past fifteen years, have caused a decline in the purchasing power of the dollar, Mr. Steiss examines the history and operation of "the welfare state", points up some its more important implications, and asks: "What price full employment?"

Recent announcements that Canada's defence costs are going to soar very much higher than this year's record $860,000,000 and forecasts that for the next fiscal year the defence budget will be in the neighbourhood of $1,500,000,000 contain an economic significance far beyond that of the inevitably and substantially higher taxes that it will be necessary for the government to impose to meet these costs.

With most of our basic industries already operating at full capacity for peace-time needs and with our labour force virtually fully employed, conditions to-day are far different from those which prevailed immediately prior to the outbreak of World War II. At that time there was a large unused capacity in most of our essential industries which was immediately available for war production purposes and there was a considerable amount of unemployment. But to-day there is no such backlog of idle productive capacity or quickly available unemployed labour to draw on to meet the needs of a $1,500,000,000 defence program. Until production capacities are increased it is likely that there will be a fierce competition of dollars for goods on the part of the defence program spending on the one hand and civilian spending on the other hand. *Unless there is a decrease in civilian spending, it would seem that further inflation is an inevitable result.*

Already there have been introduced several governmental measures to stem inflation — the higher taxes contained in the Baby Budget of last September, freeing of the dollar, regulations to curb instalment buying, increase in the Bank of Canada rediscount rate, and the deflationary open market operations by the Bank of Canada. Most of these measures have had as their main objective the curtailment of spending by the public. Nevertheless, in spite of these measures, the cost-of-living index on January 1, 1951 stood at 172.5, the highest mark ever reached, in comparison with 161.0 as at January 1, 1950, with 123.6 as at the close of World War II and with 101.5 at the outbreak of World War II in 1939.

The purpose of this article is to examine the fundamental economic factors which have brought about a decline during the past fifteen years of approximately 44% in the purchasing power of the dollar on the basis of the cost-of-living index. It is believed that such a discussion will assist in estimating the dangers of still further erosion in the purchasing power of the dollar resulting from the inflationary implications of an expanding defence program which may have to be continued for many years to come.

A great deal has been said and written in recent years about the virtues of a new economic philosophy known as "full employment", sometimes also referred to as "the welfare state" or "planned economy". The government of nearly every country in the world is committed to this new economic system and practically all political parties subscribe to its principles in varying degree. Few people realize what this new economic theory really is. Its implications and consequences on our economy are little understood. Let us consider briefly the history of this comparatively new economic thinking; how it operates; some of its more important implications; and then finally ask ourselves how far governments can go in ensuring its continuance.

Era of "Unplanned" Economy

The economic system that prevailed during the period when the foundations of our present economic achievements in Canada were laid was one where the rewards of success and the penalties of failure constituted the motives that stimulated an individual's and a nation's production to higher and higher levels with resulting benefits to all. It was a system where hard work and thrift were the universally accepted keys to economic success and where there was little or no governmental interference with the natural laws of economics. The economic laws and principles which provided the foundation for this system were first clearly enunciated in 1776 by Adam Smith in his "Welfare of Nations" where he laid down that the fundamental psychological motive in political economy is the natural effort of every individual to better his own condition, and the greatest contribution to the wealth and prosperity of a nation comes from a system where every man is left free to pursue his own interest in his own way so long as he does not violate the laws of justice.

In the field of finance, the governments of practically every civilized country subscribed to a policy of "sound money". By sound money is meant merely the maintenance of stability of a currency in terms of purchasing power. Gold which for some four or five thousand years had been recognized as a store of value became, through the adoption of the gold standard, the sole standard of purchasing power in Great Britain early in the 19th century. Long before the beginning of the

20th century the gold standard had been adopted by practically every important country in the world. The gold standard gave the right of gold withdrawal by individuals who distrusted government policies and countries with trade deficits had to export gold to settle international balances. Such losses of gold provided an automatic check on credit expansion, curtailed spending, reduced price levels and in this way brought its own remedies against excessive spending. So long as governments adhered to the gold standard they were forced to live within their income if they wished to avert disaster — just as an individual must keep his expenses within his income if he wishes to avoid bankruptcy.

Economists the world over have universally accepted the belief that during the hundred or more years that these natural laws and principles governed our economic and financial activities, the system worked with extraordinary success and facilitated the growth of wealth on an unprecedented scale. This increase in wealth was accompanied by the greatest strides forward that the world has ever experienced in such matters as education, medicine, working conditions and living standards for the masses.

Birth of Full Employment Theory

It has been said that there is no record of any country engaging in a prolonged war unaccompanied by far-reaching changes in its economy and in its money. World War I was no exception. Under the stress and strain of total war Great Britain was forced into huge budgetary deficits which necessitated the suspension of gold payments immediately upon the outbreak of hostilities in August, 1914. In the interest of national security the philosophy of a balanced budget and sound money had to be abandoned, and as a result of tremendous governmental spending, price levels rose rapidly. The same thing happened in every other country engaged in World War I except the U.S.A., which succeeded in maintaining gold payments. With the cessation of hostilities and resulting greatly diminished governmental spending price levels tumbled again. These violent swings brought great hardships on certain sections of the population. During the upswing it meant that the real incomes in terms of purchasing power of the fixed salary classes and people who lived on their savings were sharply reduced. On the downswing it brought with it great hardships in the form of large scale unemployment.

These events impressed upon the governments and economists the far reaching influences of changes in price levels on the welfare of a nation's people. It was recognized that this inflation and deflation in price levels stemmed from the wartime budgetary deficits and not from any weaknesses inherent in the gold standard as such; but many economists became alarmed over the possibility of recurring wide swings in price levels either in a deflationary direction arising from the failure of

new gold discoveries to keep up with the increasing demands for currency resulting from the rapidly increasing volume of trade in the 1920's, or in an inflationary direction arising from some sudden large new gold finds.

John Maynard Keynes, Professor of Economics at Cambridge University, England, was the leader in this new thinking and as early as 1923 he came forth with a strong plea for a "managed currency" entirely divorced from gold or any other metallic standard. It was his philosophy that with a view to averting periods of unemployment, governments, through a controlled central bank, should increase the supply of money in circulation and lower interest rates whenever business showed signs of slowing down or needed some stimulation, and contract the supply and stiffen interest rates whenever business indulged in speculative excesses. The purpose of all this artificial control of money supply and interest rates was to maintain a steady employment for the working classes; hence this theory has become known as the theory of "full employment". It pushed aside the idea of sound money and the gold standard which had served us so well for more than a century and brought to the forefront as the paramount aim the maintenance of employment.

Full Employment Theory in Practice

Managed Currency

For several years the Keynesian theory was of interest only to students of economics in university classrooms. . Two events, however, brought this new idea a tremendous following. The first was in 1925 when the British government in resuming the gold standard ill-advisedly deflated its currency to bring the pound sterling back to its pre-war value in terms of gold instead of stabilizing the pound at some lower level. This wrecked Britain's export trade because of the advance in the price of the pound in terms of other world currencies; it brought on great unemployment in Britain especially in the coal mines and finally led to the General Strike of 1926. The second event was the business depression of the early 1930's which led to almost world-wide unemployment on an unprecedented scale.

President Franklin Roosevelt was probably the first man to put the Keynesian theory into practice when he suspended gold payments and raised the price of gold in March, 1933, thereby artificially expanding the credit base of the American banking system. Almost immediately the forces of deflation were arrested and in their place strong forces of inflation were set in motion with a consequent early recovery in employment.

In Canada the influence of the Keynesian theory is plainly seen in the preamble to the Bank of Canada Act of 1934 establishing the Bank

of Canada which began operations in 1935 and introduced a central banking system in this country. The preamble reads in part, "Whereas it is desirable to establish a central bank in Canada to regulate credit and currency in the best interests of the economic life of the nation, to control and protect the external value of the national monetary unit and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment, so far as may be possible within the scope of monetary action, and generally to promote the economic and financial welfare of the Dominion. . . . ." Note the direct reference to regulating credit and currency, to mitigating fluctuations in employment and to promoting the economic and financial welfare of the Dominion. Plainly it commits Canada to the creed of "managed currency." Similarly a little more than a year ago in the U.S.A. the Secretary of the Treasury bluntly announced the following policy: "The general economic welfare of the country should be the guiding principle in determining for any given period whether the Federal budget should be balanced, should show a surplus, or should show a deficit, and in determining the size of any surplus or deficit."

The same managed currency policies directed toward "welfare" prevail in England and in fact in practically every important country in the world to-day. Nowhere is there any longer any mention of "sound money" as we once knew it and scarcely do we any longer hear mentioned the virtues of governments living within their income through balanced budgets or the disciplinary safeguards of the gold standard.

Government Spending

The depression of the early thirties gave birth in the governmental circles of Great Britain, U.S.A., Canada and most other important countries to still another new philosophy in economics and finance — one which was equally as contradictory to the 19th century and early 20th century school of orthodox economics and finance as the philosophy of a managed currency, but one which has become widely adopted and applied in an increasingly large degree, particularly since the end of World War II. This philosophy has to do with government spending and is based on the belief that governments can "spend their way into prosperity". Formerly the traditional purpose of taxation levies was primarily to meet governmental expenditures and to produce a balanced budget. To-day budgets are designed largely to achieve social purposes, to allocate incomes and to redistribute financial resources — in other words, "to share the wealth".

These two philosophies, then — first, a managed currency and second, government spending — are the two principal means by which governments have endeavoured to fulfill the idea of so-called "full employment". Let us examine what has taken place in Canada in these fields in recent years.

Managed Currency in Canada

After many years of successful decentralized banking in Canada directed by the managements of the various chartered banks with a minimum of government control, an Act of Parliament in 1934 incorporated a central bank known as the Bank of Canada, which commenced operations in 1935 and became a wholly government-owned institution in 1938. One of its principal functions was to exercise a regulating influence over the total volume of purchasing media in the country. In this connection it is important to point out that there is a long established economic law which states that other things being equal, any increase in the amount of money and credit in the form of bank deposits circulated in a country will result in a corresponding increase in the price level within that country. Conversely any decrease in such purchasing media will result in a decline in the price level. This assumes, of course, that there is no change in the velocity in circulation of this money and credit and also no change in the total volume of trade carried on within a country. Thus it is seen that the creation of the Bank of Canada increased tremendously the influence and power of the government in the sphere of money, credit, banking and prices.

By terms of the Act of 1934 the right of note issue was taken away from the chartered banks and vested entirely in the Bank of Canada. The regulation of the amount of credit that should be established in the form of loans, instead of being left as formerly to the wisdom and judgment of the managements of the chartered banks to decide upon in the light of the legitimate needs of industry and trade, was placed entirely under the jurisdiction of the Bank of Canada. It is quite clear then that the creation of this central bank and its subsequent complete control by the government was an important step in the direction of government control in our economy.

It is important to understand just how the Bank of Canada regulates the amount of currency and credit in circulation. As already stated, it has the sole right of note issue and at first the only restriction on the amount of currency it could issue was a requirement to maintain a gold reserve of at least 25% of its note and deposit liabilities. Under the stress of wartime conditions, however, this reserve requirement was suspended in 1940 and has not yet been reinstated. This means that the only safeguard against excessive use of central bank credit, with all its inflationary possibilities, is the wisdom, moderation and restraint displayed by the government in the exercise of its monetary authority.

The reserves of the chartered banks no longer consist of gold, all of which was turned over to the Bank of Canada which in turn later transferred it to the Foreign Exchange Control Board, but rather the reserves of the chartered banks now consist entirely of notes of the Bank of Canada and deposits with the Bank of Canada. Chartered banks are per-

mitted to build up credit in the form of loans, or in other words to create deposits, up to a limit of twenty times their reserves for the reason that the Act provides for only a 5% reserve requirement on their deposit liabilities. As a matter of policy, however, the chartered banks have voluntarily adopted a 10% reserve requirement and consequently have habitually confined themselves to limiting their credit extensions to ten times their reserves. Thus it is seen that anything which increases the volume of Bank of Canada notes held by the banks or the deposits of the chartered banks with the Bank of Canada permits these chartered banks to increase credit extensions and thereby exerts a tremendously inflationary influence. Conversely anything which decreases Bank of Canada notes or deposits of chartered banks with the Bank of Canada decreases the amount of credit which chartered banks can extend and is consequently deflationary in character.

How does the Bank of Canada expand and contract these reserves and thereby exert its important regulating influence on the volume of credit in circulation? Chiefly it does this through so-called "open market" operations in the high grade bond market. When the Bank of Canada buys bonds in the open market from, say, John Smith in the amount of one million dollars it gives its cheque to him for that amount. Smith deposits it in his account with his chartered bank. This increases his bank's reserves with the Bank of Canada and with this increase of one million dollars in reserves it can expand its credit extensions by ten times or by ten million dollars. Exactly the converse is true when the Bank of Canada sells securities in the open market. John Smith then draws on his bank in favour of the Bank of Canada which reduces its balance with the Bank of Canada and this in turn calls for a contraction in its credit extensions. It makes no difference from whom the Bank of Canada buys or to whom it sells securities. Nor does it make any difference that John Smith transacts the business through bond dealers. The effect is always the same. Through these "open market" operations in the high grade bond market it is quite apparent that the Bank of Canada also exerts an important control over interest rates, tending to stiffen rates when it buys bonds in the open market in volume and to depress rates when it is a large seller of bonds.

It is quite true that the chartered banks are not always able to find suitable customers to whom to grant loans every time an increase in credit is made possible by an increase in their reserves. In order to make the greatest use of their increased earning capacity made possible by the increase in reserves, however, the chartered banks usually enter the high grade bond market themselves and buy short term high grade bonds because it is better to earn a small rate of interest by employing their credit this way than to forego its use entirely. Thus chartered banks themselves, as well as the Bank of Canada, have been an important factor in the high grade bond market in this country.

By the methods just described, the money supply in Canada consisting of notes, coins and bank deposits has quadrupled since 1938 from $1,088,000,000 to $4,422,000,000 at the end of 1949. Both notes and coins on the one hand and bank credit in the form of bank deposits on the other increased in approximately like proportions, namely four to one. Herein lies the answer to the increases that have occurred in the cost of living index to 172.5 in January, 1951, taking the average prices of the period 1935-1939 as the base of 100. The question may be asked: why in the face of a quadrupling in the money supply did not prices move up by an equal percentage? The answer lies of course in the fact that the volume of trade also increased. Cheques cashed in clearing house centres give a good indication of volume of trade and these clearings have almost trebled in the period since 1938.

Government Spending in Canada

Now let us turn to the field of government spending. In 1913, the Dominion Government spent approximately $144,000,000 of which less than $3,000,000 was for public welfare. In 1938, it collected in taxes and spent approximately $548,000,000. In the 1949-1950 fiscal year the Dominion Government collected in taxes and spent no less than $2,400,-000,000 or more than four times as much as in 1938. National defence expenditures in 1949-1950 stood at $378,000,000 against approximately $68,000,000 in 1938. Interest charges on our increased national debt amounted to $433,000,000 against $132,000,000 in 1938. But by far the largest increase is accounted for by expenditures for public welfare or social services which in 1949-1950 cost the government more than $438,-000,000 — a figure exclusive of payments to veterans.

Of this amount $285,000,000 was spent for family allowances or the baby bonuses alone; $74,000,000 was for old age pensions; $21,500,-000 went to unemployment insurance and the remainder to various other departments including public health, etc. In addition approximately $88,000,000 went to various subsidies and grants primarily agricultural, such as the Canadian Wheat Board and the Commodities Prices Stabilization Corporation, as against a figure of less than $10,000,000 in 1938.

In 1939, 5.6 cents out of every dollar collected in taxes by the Dominion Government went into social services or welfare and special subsidies or grants to special classes, particularly the farmers; for the 1949-1950 fiscal year 22 cents out of every dollar collected by the Dominion Government in taxes went into those services and subsidies. Combined, these constituted the largest single item in the budget. This 22 cents per dollar compares with only 6 cents for every dollar spent for welfare purposes, subsidies etc. by the U.S.A. government in the same year.

Let us now examine where the money for these expenditures comes from. In 1938 the federal government collected a total of $109,000,000

in income taxes from individuals and corporations. These taxes amounted to less than one-fifth of the government's total taxes collected. But in 1948 it collected a total of approximately $1,200,000,000 from individuals and corporations in income taxes and this figure amounted to about one-half of its tax revenues. Of the income tax receipts somewhat over half came from individuals and less than half from corporations. These figures clearly indicate who is paying for the tremendously increased welfare expenditures of the government.

As for prospects of any substantial reduction in total government expenditures in the near future, these would seem to be very gloomy indeed. National defence expenditure estimates have been revised upwards every few weeks recently. Even though the 1950-1951 estimated expenditures of $860,000,000 are more than double the $378,000,000 spent in 1949-1950, and the estimated $1,500,000,000 are nearly double those of 1950-1951, it has already been indicated that this latter figure may be too low and will likely be closer to $2,000,000,000. It is doubtful whether even this large amount is adequate in the light of present day conditions.

Notwithstanding the huge burden of taxation that will inevitably result from this defence program, it appears that our governments — federal and provincial — are planning to extend, probably early in 1952, the Old Age Pension Act to include a pension of $40.00 a month to every individual over 70 years of age without a means test and a similar payment to any individual between 65 and 70 years with a means test, the cost of the latter to be borne on a fifty-fifty basis between the federal and provincial governments. It is estimated that this will involve an additional burden of approximately $250,000,000 for the federal government for old age pensions.

Implications of Full Employment Theory

It is quite apparent that the foundations of this new philosophy of full employment are based on high government expenditures, high prices and low interest rates. Their implications and consequences on our economy are numerous and far-reaching. It is impossible to deal here with more than a few of them, but let us consider some of the more important and obvious ones from the standpoint of first, the individual; second, business; and third, our national economy.

The Individual

While wage rates in many industries have kept pace — and in some industries have more than kept pace — with rising living costs, and while the prices that the farmer gets for his produce have advanced much more than has the cost of living, people working for a salary and most people living entirely off their savings have suffered a drastic reduction in the

real value of their income. In 1933 a married man who had no children and was earning a salary of $3,000 per annum had an income available after taxes of $2,970. Now, however, a $3,000 salary to the same man after deducting income taxes at 1950 rates and adjusting the balance for the higher cost of living as compared with 1933 has remaining to him a purchasing power in terms of 1933 dollars of only $1,559. Similarly a man with a $5,000 salary had an income of $4,880 after taxes in 1933 but the same salary now after deducting higher income taxes and adjusting for the higher cost of living is worth only $2,457 to him. A $10,000 salary now is worth only $4,564 or less than a $5,000 salary was worth in 1933.

Let us take the case of a man who through hard work and thrift has put by an amount of $50,000 to provide for his and his wife's old age. He is not conversant with the workings of the stock market and feels unqualified to invest his savings in other than what he considers the safest security — a Dominion of Canada bond. In 1933 he could invest in such a bond at a yield of 4½%, which on $50,000 gave him a return of $2,250 a year less $8.00 income tax leaving a net of $2,242. Now, however, he can get barely 3% on a Dominion of Canada bond which gives him a return of under $1,500 a year, and, adjusted for the higher cost of living, he has an income in terms of 1933 dollars of $828 a year. It is a tragedy that for many people such should be the rewards for a lifetime of hard work and thrift.

Let us take still another set of examples. A man dies in 1933 and leaves an estate of $100,000 with the income to go to his widow. After the payment of succession duties and investment of the balance at 4½% there is an income after income taxes of $4,087. But the same estate now after she pays substantially higher succession duties, invests the balance at 3%, pays higher income taxes on the balance and adjusts for the higher cost of living would give the widow an income of only $1,401 in terms of 1933 purchasing power. For an estate of $250,000 the figures are an income of only $2,938 now as compared with $9,607 in 1933, and for an estate of $1,000,000 the income to a widow after adjusting for the high cost of living is only $8,044 in terms of 1933 purchasing power as compared to $30,527 in 1933. Thus it is seen that an estate of $1,000,000 now produces considerably less real income in terms of purchasing power than did an estate of $250,000 in 1933.

The drastic reductions in the real incomes of salaried workers and people living on fixed incomes has made it increasingly difficult for an important section of our population to save much, if anything. The problem of providing for their own old age security has become increasingly difficult for a great many people and as a consequence they are becoming more and more dependent on the government for their livelihood in their old age.

The question may be asked how can you reconcile the fact that during recent years savings deposits have increased by very substantial amounts. The fact is that these savings are largely due to the higher real incomes of the labouring class and farmers who, as already indicated, have been the chief beneficiaries in the redistribution of income effected by our present economic and social policies. The large scale organization of labour into unions has given labour a tremendous political power and the impetus to their organization was given largely by labour's desire to seek higher wages to offset higher living costs resulting from full employment policies.

Business

From the standpoint of business concerns, full employment has had similarly far-reaching implications. Mounting costs and taxes have shoved the break-even point of virtually all corporations to higher and higher levels. It has put our gold mining companies into the depressed industry class; has necessitated the cessation of mining operations in formerly profitable although low grade ore properties; and has slowed up appreciably new gold prospecting activities. In the great majority of other industries, the sharp increases in break-even points have been obscured by increased volume of operations and will not become apparent until volume drops. Thus it is seen that many companies which now look exceedingly prosperous are extremely vulnerable to a decline in volume because of the increasingly thinner margin of profits as labour and material costs keep rising.

The artificial controlling of interest rates also poses a problem which could have serious consequences on business. Prior to the early thirties when interest rates were permitted to find their own levels there had always existed a close correlation between commodity prices and interest rates. Interest rates accompanied commodity prices up and acted as an automatic "brake" on excessive speculation, while in periods of low commodity prices, low interest rates encouraged stocking up of inventories and stimulated recovery of prices and business. With the artificial control of interest rates, however, this automatic brake on high prices no longer applies, inasmuch as we have had a long period of rising prices during a period when interest rates have been deliberately pushed to lower and lower levels. Many businessmen are extremely anxious about this unnatural relationship which has been artificially established between prices and interest rates and, believing that sooner or later the natural laws of economics will assert themselves and become adjusted to price levels, fear the possible consequence of a sudden sharp rise in interest rates followed by a sharp drop in price levels.

Our National Economy

From the point of view of our national economy, by far the most important implication of "full employment" is its threat to our foreign

trade. We are primarily an exporting nation with approximately 30% of our national income derived from our foreign trade which has been built up on a system of multilateral trade, the convertibility of currencies, and price competition. By the adoption of monetary policies which have resulted in the almost constantly rising price levels already referred to, we are running a great risk in Canada of pricing ourselves entirely out of the export market in many lines if we permit price levels to continue upward indefinitely. This will be all the more important when the time comes that the present high demands in our domestic market are filled and we have to rely again to a greater extent on foreign markets for the maintenance of our living standards.

In the five years preceding the war 40% of our exports went to the U.K. and 36% to the U.S.A. In 1949, however, only 23% went to the U.K. and 50% to the U.S.A. and preliminary figures for 1950 show that a very much higher percentage — approximately 65% — went to the U.S.A. and only 15% to the United Kingdom. The inconvertibility of the pound has forced Britain to forsake Canada as her source of supply in many items and to obtain them through bilateral or pseudo-barter arrangements elsewhere. Thus we have been forced to rely more and more, as the figures show, on the American market. Many people view seriously our vulnerability to business conditions and import trade policies in the U.S.A. on whom our export trade is now so predominantly dependent. *In this connection it is interesting to note a recent announcement that Canada and the United Kingdom have failed to reach an agreement on the bacon contracts largely as a result of the high domestic price for bacon being obtained by producers in the home market.*

It is well known that high commodity prices in the U.S.A. resulting from their "full employment" program so stimulated agricultural production there that food surpluses became a curse and almost a year ago constituted one of that country's principal internal problems. Instead of permitting prices to find their own levels thereby bringing about a remedy, their government, to maintain the incomes of the farmers, adopted a program of price supports and subsidies which only aggravated the problem — as it is only natural that it would do.

Thanks at least in part to the Marshall Plan, we have had no serious food surpluses in Canada in recent years. But we have legislation which provides for farm product price support programs in such items as wheat, bacon, butter, eggs, cheese and apples. In bacon, for example, the government has bought at 32½ cents a pound—the floor price—and has sold to Britain at 29 cents a pound. The taxpayer has paid the difference. With indications that the U.K. may cut her food purchases from us this year and buy elsewhere to save dollars, it is to be hoped that our price support program will not be permitted to aggravate the problem still further by maintaining prices at such levels that they become incentives

to still higher production. Such has been the case in the U.S.A. where this program has cost the taxpayer many billions of dollars annually.

An equally and perhaps more important implication of "full employment" to our national economy has to do with production. The essence of the welfare state is that a proportion of the national income shall be redistributed by the state to provide a certain minimum basis of economic security for everybody regardless of skill or earning capacity. Higher pay to the working classes has not, except perhaps in a few isolated cases, brought higher production. On the contrary it seems to have incited them to more and more demands for shorter hours. More pay and less work has been the usual motto. This means that production is not as high as it might be and to that extent the country's standard of living is not as high as it might be.

When Keynes introduced his idea of managed currency it was his thought that inflationary steps should be taken by the currency managers only when business decline threatened to grow into serious recessions or depressions and deflationary steps should be taken when there were speculative excesses. The same views were held by the early proponents of government spending as a means of attaining prosperity. But in spite of higher and higher business activity of "boom" dimensions and all time highs for national income year after year, our governments have been almost constantly "priming the pump". Once the government embarks upon a course of free services to the electorate, it is extremely difficult to find a stopping place or even to slow down the rate of extension of these services. In this connection it is interesting to note that shortly before Keynes died only a few years ago he admitted the weakness of his idea of managed currency.

How Long Can Governments Continue Full Employment Policies?

We have seen that in Canada the idea of "full employment" is being fulfilled mainly by high government expenditures, increasing the supply of money in circulation and controlling interest rates at low levels. How far can the government go in continuing these policies? The answer to this question is of fundamental importance as it directly affects not only the outlook of every Canadian business and financial institution but also the life of every individual in Canada.

So long as we elect governments who are committed to high government spending for welfare purposes there is little likelihood of any early cessation of the trend to higher government expenditures. All of our political parties in Canada subscribe to the social welfare doctrine and on this score there is probably little to choose between them although some may subscribe to the doctrine more than others. Unless public opinion changes, which is unlikely because of the present political power of the labouring masses and the farmers who are the prin-

cipal beneficiaries of the spending policies, there is nothing to prevent the government's increasing its spending considerably further.

Because of high expenditures for war purposes, our national debt rose from $3,152,000,000 as at March 31, 1939, to an all-time high of $13,421,000,000 as at March 31, 1946. Since then budget surpluses, as for example $676,000,000 for the 1948 fiscal year, $595,000,000 for the 1949 fiscal year and $111,000,000 for the 1949-1950 fiscal year, reduced the debt to $11,665,000,000 as at March 31, 1950. We can hardly expect that our national income will continue to go up year after year in anything like the same proportions as it has been doing in the past decade—from $4,289,000,000 in 1939 to $12,917,000,000 in 1949 — and while the national income for 1950 has been estimated at $14,000,000,000 there may occur sooner or later an interruption in its upward course which will be reflected in decreased income tax revenues. On the other hand, the analysis given of government expenditures shows how rigid this level of expenditures is and how uncontrollable most of the items are, particularly the larger items of interest on debt, expenditures for national defence, and expenditures for social services. These non-controllable expenditures in the fiscal year 1949-1950 constituted more than half of total federal government spending. In other words, the break-even point of government finances is mounting higher and higher all the time requiring boom business conditions if deficit financing is to be averted.

Regardless of which method is adopted by the government to finance the continually larger amounts it pays out in the form of welfare and social service payments every year, whether it is by balancing the budget through higher taxes or by deficit financing which means borrowing, it all means further and further inflation. Particularly is this so of deficit financing which means that the government is putting more purchasing power into the hands of the public through expenditures than it is taking away from them in the form of taxes.

It is often the intention of governments to balance their budgets by collecting in taxes as much as they spend. As governmental expenditures rise to higher and higher levels, however, there comes a point when correspondingly increased taxes may be considered inadvisable by the government in power. It is quite an easy matter for them to turn to deficit financing. Thus, after having outrun the taxpaying capacity of a country, governmental expenditures can still continue to rise without limit through the medium of deficit financing.

Similarly there would appear to be no limit to the Bank of Canada's power to increase the supply of money in circulation. All legal limits to its note circulation were removed with the suspension in 1940 of the 25% gold reserve requirement — which requirement has not yet been

reinstated. The only limits are the wisdom, moderation and restraint of government officials.

Finally, let us consider the limitations to the Bank of Canada's powers to increase the base on which banking credit is expanded and to control interest rates at present low levels, or in other words to continue its cheap money policy. As already discussed, these controls are exercised by the Bank of Canada through its open market operations in the high grade bond market. The more bonds the Bank of Canada buys on the open market the higher the credit base created for the chartered banks. Also, because interest rates vary inversely to bond prices, the Bank of Canada as the government's fiscal agent must put a floor under the high grade bond market and accordingly must stand ready to pay the floor price or better to anyone who offers bonds — otherwise control of the cheap money policy will be lost.

Is there a legal limit to the amount of bonds the Bank of Canada can buy? For short term bonds, *i.e.* bonds maturing within two years, there is no legal limit. Medium term bonds, *i.e.* bonds maturing after two years but before ten years, may be held by the Bank of Canada to the extent of half of its combined note issue and deposit liabilities. But in effect, this limit is only fictitious because the Bank of Canada can, as already seen, expand its note issue *ad infinitum* and can also increase its deposit liabilities by purchases of high grade bonds direct from the Dominion Government. On long term bonds, *i.e.* bonds maturing in ten years or more, the Bank of Canada is limited to five times the combined capital and rest fund and since the size of both these funds is set by the Act, its holdings of "longs" is rigidly restricted to $75,250,000. But, even though this rigid legal limit were reached by the Bank of Canada the government could still support the high grade bond market by purchasing bonds in the open market for its Unemployment Insurance fund and 12 other government accounts which as at December 31, 1949, held a total of $796,000,000 Dominion of Canada Bonds. If that failed to adequately support the market, there would appear to be nothing to stop the government's introducing amending legislation to relax the legal limits for the Bank of Canada's holdings. Thus it is seen that there may be really no legal limits to which the government can go in supporting the bond market and ensuring cheap money.

Because of the important implications and consequences of "full employment" on our economy, economists have endeavoured for years to find where the limits to full employment policies could be found and how they could be defined. But there has not yet been provided the example of a break-down in interest rate control for which economists have been looking. On the contrary economists are now almost universally agreed that it is no longer a question of *"full employment" — how far can it go?* but rather a question of *"full employment" — at what price?* What is the price of further extensions of full employment policies in

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Canada? We have already seen the price of our full employment policies to date in terms of high taxes, high cost of living and serious and disastrous reductions in the real incomes of some classes of people for the benefit of others. A further extension of these policies would mean a further accentuation of these results. It might mean a serious reduction of our export trade in pricing us more and more out of foreign markets with consequently severe declines in our business activity and living standards because of our great dependence on export trade.

We cannot compare ourselves with the U.S.A. in matters of full employment policies and say that since they are devoting 30% of their national income to government spending, including federal, state and municipal, compared with our 25% for federal, provincial and municipal, we, therefore, can go still further without risk. Compared with approximately 30% of our national income's coming directly and indirectly from our export trade, the U.S.A. depends on her export trade to the extent of only between 5% and 10% of her national income. Accordingly she can do things that we cannot possibly do. She can afford to forego her entire export market without serious economic results. In Canada the complete loss of our export market would mean virtual ruin.

Our exports in 1950 amounted to $220 *per capita* or more than three times the *per capita* export trade of the U.S.A. On a *per capita* basis Canada is the largest exporting country in the world. Our rapidly growing domestic market and the great expansion in our natural resources and manufacturing industries may have made us less dependent on foreign trade than we have been in the past; but it is our large export trade that has given us a standard of living that is second highest in the world and vastly higher than we could have achieved by living solely unto ourselves. Just as it has already been seen that the United Kingdom is looking elsewhere for cheaper food supplies than she can obtain from Canada because of the high prices in our domestic market, so it is hoped that this may serve as a warning to us that we cannot let inflationary tendencies continue without endangering our export trade which is so vital to our present living standards. If we allow our price levels to go sufficiently higher, at some point our customers will seek their supplies elsewhere. It has happened before that countries have priced themselves almost completely out of their former export markets with a consequent sharp reduction in their living standards and employment. It would be a tragedy indeed and a paradox if such were the price we were to pay for the continuation and extension of the welfare state experiment in Canada.

Summary and Conclusions

This article has sought neither to condemn nor to condone governmental monetary and fiscal policies. Rather, it has tried to provide a

factual background to some of the important and far reaching changes that have occurred in our economy over the past fifteen years as a result of these policies. They have been the fundamental factor in the inflation of price levels or depreciation in the purchasing power of the dollar that has made itself so evident in the sharply rising cost of living. The addition of an unprecedented peace-time defence expenditure program to an economy already in a condition of virtual full employment and to an already high governmental budget for civilian purposes brings with it strains and stresses which will inevitably give a renewed impetus to still greater inflationary tendencies and higher living costs. Price controls will not provide a solution — they merely treat the symptoms while the inflationary pressures become constantly greater.

Inflation is not a mystery. It is a direct result of an increase in the demand for goods and services without a corresponding increase in the production of goods and services—in other words, it is a result of the operation of the law of supply and demand. The increase in the demand for goods and services in turn results from an expansion in the volume of currency and credit, an expansion largely attributable to the social and welfare programs instituted by governments in so many countries during the past fifteen years.

There would appear to be only two methods whereby inflation can be successfully attacked at its root causes—by an increase in the supply of goods and services which means higher production and by a decrease in the demand for goods and services which means a curtailment in the volume of currency and credit in circulation or in the velocity of its turnover. Both in Canada and in the U.S.A. steps have already been taken to effect certain curtailments of credit extension. The governments of both countries have also indicated a strong desire to finance their present armament programs on a "pay as you go" basis rather than on a highly inflationary "deficit financing" basis. Only by a combination of higher production and reduction in the volume of currency and credit by the institution of an appropriate monetary policy together with economies in non-essential spending, both governmental and individual, would it appear that the upward spiral in rising living costs can be arrested and the future of the great middle class section of our population be safeguarded. If, on the other hand, more and more impetus is going to be given to inflationary processes by constantly pumping more and more currency and credit into the monetary stream, inflation may well become progressive and permanent and the burden on the fixed income middle class people who do not benefit from higher prices but are penalized by them through higher living costs, will become more and more serious. It is they who constitute the "forgotten man" of today and it may well behoove us to recall the disastrous events that have taken place in other countries where inflation completely wiped out their middle classes which had constituted the backbone of their population.

We have all heard it said that ever since the end of World War II Stalin has been waiting for a business depression to hit the Western World which would be accompanied by such discontent and internal dissension in these countries as to make possible a bloodless sweep of communism through them; and that as a consequence it was essential for governments in these countries to adopt such monetary policies as would keep the economy running at a high pitch in order to avert the possibility of business depression or recession no matter how high the costs to any individual section of the population. It would seem to be just as sensible to say that Stalin may be waiting for the Western World to inflate the backbone of its population — the middle classes — completely out of existence. Indeed, few people realize how serious and far reaching are the effects of a deterioration in the purchasing power of a country's currency.

A Keener Tool For Quality Control

Brant Bonner
Professor of Business Administration
University of Western Ontario

Dr. Bonner highlights recent developments in the use of statistical methods for controlling quality, explains the technique in layman's language, and assesses its future impact on Canadian industry.

STATISTICAL QUALITY CONTROL is a relatively new management tool which is receiving increased attention from Canadian manufacturers. In using statistical methods in the control of quality, it is possible to increase the proportion of acceptable units manufactured, and conversely, to reduce the amount of scrap and rework. In turn, customer relations are improved, because it is possible for the manufacturer producing under statistical quality control to certify the quality of his product. Among other advantages are lower inspection costs and better worker morale.

The application of statistical technique to problems of production was first made by Dr. Walter A. Shewhart of the Bell Telephone Laboratories some twenty-five years ago. He carried on a special study of production data supplied by Western Electric, Bell subsidiary, in the hopes of being able to make suggestions which would reduce the number of unacceptable units and lessen the cost of inspection.

Chance vs. Assignable Causes of Production Variation

Dr. Shewhart found that regardless of the degree of precision that may be introduced into a manufacturing process, there will always be variation in the units produced. No two articles can be made alike. Where variation can be reduced by the use of better raw materials, closer machine tolerances, *et cetera,* it is said to result from assignable causes. Where variation cannot be accounted for in a given productive process, except in very broad terms, it is said to result from chance causes. Write a series of a's, trying to make them all alike, Dr. Shewhart suggests. Actually no two will be alike. Why? One might hazard a guess about uneven paper texture, pencil lead which wasn't smooth, and so on, but there is no satisfactory explanation. Such variation is chance variation. If the a's had been written with a number of different writing instruments, some of the variation could have been explained, of course, and eliminated.

Certain predictions can be made about variation which results from chance cause. In rolling a pair of dice it is possible to get any one of thirty-six different combinations. Six of the combinations will produce a seven; therefore, the probability of getting a seven on any one roll is one out of six. In tossing a penny, there is one chance out of two of getting a head; in tossing two pennies, there are two chances out of four of getting one head, and one chance out of four of getting two heads. Chance variation forms a pattern which can be predicted, whether the chance is in rolling dice, tossing coins, drawing cards, or in industrial production.

In statistical quality control probability theory is used to predict what the chance variation will be in a given productive process in the same way that a gambler predicts his chance of drawing a certain card, or rolling a given number with a pair of dice. Such prediction would of course not cover variation due to an assignable cause, such as having an inexperienced man operate the machine.

What Is Statistical Quality Control?

To illustrate the use of this new technique, let us assume that rods are to be cut to a length of 2.0645", with a tolerance of plus and minus .0005". The productive process will likely require some adjustment to produce rods within the blue print specifications, but after the adjustment has been made, the length of the rods will be within the limits unless assignable causes of variation enter into the picture.

The Control Chart

The heart of the system is the control chart. The control chart has been likened to the baseball score board in that it tells what is going on. Essentially the chart has three lines; two constitute the upper and lower control limits, while the third, a line equidistant from the control limits, is the average line. These lines are determined from a study of units produced after the productive process has been set up. As suggested above, if they are not in conformity with the blue print specifications, the productive process will have to be refined. With the process under statistical control, the average line will be at 2.0645", in the case of the illustration, and the control limits, which will be determined mathematically, will be at such levels as will insure that all units produced will be within the tolerance limits, assuming only chance variation is present.

The control chart, as the name implies, permits control of production. Without this control it is necessary to make a 100% inspection of all units produced.

The Sample Average

With control it is necessary only to seek assurance from time to time that the variation in the units being produced is merely the chance varia-

tion anticipated. This assurance can be had by selecting a few units at regular intervals and measuring them, a sampling procedure which is not unlike that followed by the housewife who samples her soup from time to time while it is cooking to assure herself that it is coming along as expected. The sample need not be large — a sample of five units is typical. It is drawn from the units currently being produced every thirty or forty minutes or so. The units are measured, and their average is computed. The average of the sample is then entered on the control chart. If the process is under control the point will fall within the control limits. The points on the chart, plotted opposite the time they were taken, are joined by straight lines, forming what the statistician calls a curve, which should fluctuate around the average line, but within the control limits.

What Statistical Quality Control Can Do

Should a sample average fall outside the control limits, production is stopped immediately. Variation other than that resulting from chance has entered into the picture, and as a result defective units are being produced. The assignable cause must be located and corrected before production can be resumed. Possibly the cutting tool needs adjustment. Actually, it is not necessary to wait until the process goes out of control before looking for the assignable cause. It was pointed out above that the curve formed by the sample averages should fluctuate around the centre line of the chart. If a series of points all fall on one side of the centre line, and are edging toward a control limit, it soon becomes apparent that the process is going out of control. Production is then stopped and adjustment made before defective units are actually produced. Without such control the fact that correction is needed would not likely be discovered until some time later at some subsequent inspection point. By that time a number of defective units would have been produced. Further, if several machines are making the same product and their output is commingled before inspection it will be necessary for the foreman to locate the machine producing the defectives, and in the meantime, more have been made.

Eliminates Defectives

It will be apparent that sampling inspection is a good deal cheaper than 100% inspection. Further, it should be noted that so-called 100% inspection is not 100% accurate. Tests have shown that it may take as many as four "100% inspections" to eliminate the defective units in a lot. This may be due in part to inefficient inspectors, to human frailties, and to weariness resulting from seeing thousands upon thousands of the same things day after day.

In like manner, control charts may be used where acceptance is on the basis of some characteristic; a watch crystal is either cracked or it

isn't; a light switch either works or it doesn't. Also control charts may be used where two or more defects may be found in a given unit. For example, an automobile frame is welded in a number of places, some of which may be cracked or missing. A given length of cloth may have several defects.

Improves Worker Morale

Another advantage of using statistical quality control is the improvement it encourages in worker morale. In the modern productive process workers seldom have the satisfaction of creating a completed article. Rather, they make a component, or perform a routine operation, and, knowing little of the quality of their work, have little basis for taking pride in it. With statistical quality control an individual's efforts can be observed on the control chart. The man at the machine has something to work for — a good chart. He can take pride in his work, and develop the feeling of a craftsman. It is not by chance that control charts are frequently large enough to be seen from some distance. Thus, the quality of his work is recorded for all to see, and wise company officials follow the practice of commending those who have good charts. With employees quality minded, the goods produced should be of better quality. It has been said that a manufacturer cannot create quality by inspection — it must be built into the product.

Reduces the Work in Receiving Inspection

Statistical quality control may be used to reduce the work in receiving inspection. To insure that the vendor has shipped goods falling within the agreed specifications, it is customary for the buyer to inspect the goods which have already been inspected by the vendor. Sometimes differences in inspection standards and differences in gauges give rise to disagreement as to quality. Using statistical quality control, the purchaser can do receiving inspection on a sampling basis. Again using probability theory, tables have been worked out which show what proportion of a lot need be inspected to insure whether the lot is satisfactory or not. Where both vendor and purchaser are using statistical quality control, it is possible to use quality level certification. The vendor and the purchaser agree on standards, gauges, and sampling plans. With each shipment goes the vendor's certification of quality; thus, the purchaser's sampling inspection of the goods when received constitutes, in effect, an audit, or verification, of the quality of the goods.

Controls Accidents

While statistical quality control is identified with production, the control chart has been used in other phases of management as well. For example, one firm has found the control chart useful in the control of accidents. By using precaution they could keep accidents to a minimum.

The day to day average at this minimum level constituted the centre line of the control chart. Control limits were computed, showing what could be expected, taking into consideration the present state of the art of using production machines, and the willingness of individuals to abide by established safety practices. Thus, with the control chart it is possible to separate the chance occurrence from extraordinary conditions which would warrant taking extraordinary corrective action.

Likewise, control charts can be used in merit rating of employees, credit control, sales, personnel placement, and so on.

The Outlook for the Future

While the advantages to be gained from using this new technique are numerous, little use was made of it by industry before World War II. With the advent of war and the demand of the military for large amounts of precision-made material, statistical quality control received great impetus. This has carried over into the post-war period. Since 1945 numerous articles have appeared in business magazines in the United States and Canada, and a number of books on the subject have been published. In the larger industrial centres of both countries quality control societies have been established where interested persons can meet and exchange experiences. In 1946, a national organization, The American Society for Quality Control, was established. With increasing emphasis on production, particularly for war purposes, the years ahead should witness a marked expansion of the use of statistical quality control in Canadian industry.

The Law on Combines and How It Operates

John M. Magwood
Senior Partner
Magwood, Frith and Pocock Law Firm

To what extent may combines in industry and commerce give rise to criminal prosecution? Mr. Magwood defined this problem in Part I of his article in *The Quarterly's* Fall issue. He sketched the historical development of government regulation of business, told how combine investigations in Canada begin and how the prosecution proceeds, and demonstrated the relationship between the Combines Investigation Act and the Criminal Code.

In Part II he continues with the citing of actual cases to show the varying interpretation which the courts place on the language of the Act and the Code. Mr. Magwood discusses the legality of price-fixing and quantity-fixing arrangements, the effect of combines laws on large corporate combinations, the legality of blacklisting, the effect of combines legislation on the law of contracts and the law of torts, and some generalizations based on case interpretation.

That businessmen should walk softly on the "precipice" of current combines legislation in Canada, and that they could, by expressing their opinions in proper democratic fashion, influence the future development of this branch of the law, are two of Mr. Magwood's major conclusions.

The Legality of Price-Fixing and Quantity-Fixing

We shall now examine the validity of various types of *price-fixing* arrangements. In *Rex* vs. *American Tobacco Co.,* a company which manufactured cigarettes entered into contracts with various jobbers. Under these contracts, which were uniform, the jobbers agreed not to sell the cigarettes at a price lower than that fixed by the company, and the company agreed to pay a commission which was to be at a higher rate if the jobber sold no cigarettes other than those manufactured by the defendant company. It was held that the contract did not constitute a combination in restraint of trade, or, in other words, that an agreement to maintain a price floor in exchange for a special sale commission was not illegal. The company merely sought to dispose of its goods in the way most advantageous to it; and the jobbers were entitled to enter into such a contract if they considered it to their advantage to do so.

In *Hately* vs. *Elliott* it was held that an agreement among several importers of a commodity to fix prices is not sufficient to constitute a

violation of Section 520 of the Criminal Code, 1892, (now Section 498) unless there is evidence that the parties conspired to prevent competition unduly, especially where there are other importers of the commodity who sell to dealers without imposing any restriction as to the price at which they should sell to consumers. But where all the coal importers in a town were members of an association which fixed prices and methods of tendering and provided penalties for non-observance of the rules of the association, it was held that there had been a violation of the Code. On the other hand, in *Gibbins* vs. *Metcalfe,* certain by-laws of the Winnipeg Grain and Produce Exchange designed to fix minimum commissions to be charged by the members of the Exchange on the sale of grain, and to prevent Exchange members from dealing with non-members, were found not to contravene Section 520 of the Criminal Code, 1892. So also in *Rex* vs. *Beckett* members of the Wholesale Grocers' Association were found not guilty of infringing Section 498 of the Code where that association had entered into an agreement with various manufacturers that the latter should fix prices at a level which would allow wholesalers a reasonable profit. A distinction was made between this case and a similar organization of coal dealers, the validity of which came before the courts in *Rex* vs. *Elliott.* In the Grocers' case, it was held that the association was founded to protect all wholesale grocers in Canada, members and non-members, and that, in this case, the prices were fixed not by the association but by the various manufacturers concerned.

In *Peloquin* vs. *Latraverse,* where the only three electrical contractors of a district entered into a combination whereby they agreed to sell only at fixed price the labour of their workmen and the merchandise which they furnished, and the effect of such an agreement was to create a monopoly by thwarting all competition so that the public interest was made to suffer unjustly through unreasonable profits, it was held that the combination was illegal in that it violated Section 498 of the Code. In *Rex* vs. *Canadian Import Co.* it was held that an agreement amongst coal importers, the purpose of which was to gain control of all coal imported, of a certain type, and then fix the resale price, was contrary to the Canadian combines legislation, and Bond J. said that it was no defence to contend that such an agreement was necessary in order to stabilize an industry or enable it to continue in existence.

There is hardly a sufficient body of case law to warrant finding a categorical danger point beyond which a price-fixing arrangement must not go. However, there is some justification for deducing from the judgments just considered that having regard for the nature of the industry concerned, and the importance of the parties to the price-fixing agreement, it will not be illegal if competition in the industry is not unduly prevented or lessened in a way that adversely affects the public interest.

But there is a difference between fixing prices and *enhancing* prices. Although certain agreements having fixed prices in view may be quite lawful, the general proposition may be laid down that all arrangements designed to enhance prices will run foul of the combines legislation. So it was held by Girouard J. in *Consumers Cordage Co.* vs. *Connolly* that

> combinations secretly organized by the fraudulent interposition of third persons paid and salaried for the purpose, to unduly enhance the price of a commercial commodity, are contrary to public policy and even criminal.

Indeed, it was partly upon the ground that no evidence had been adduced to show enhancing of prices, that the Wholesale Grocers' Association was found to be operating within the law in *Rex* vs. *Beckett.* Again, in *Stearns* vs. *Avery* it was held that where the stipulations in a price maintenance agreement between a wholesaler and a retail merchant were such as unreasonably to enhance the price of a product to the purchasing public, the agreement violated Section 498 of the Code.

There is no authority for the proposition that *quantity-fixing* is an illegal practice in itself, but it would appear that an arrangement of this kind may, because of the presence of other restrictive clauses in the agreement or because of the peculiar position of the trade concerned, violate one of the restrictions in the Act or the Code. Thus a production quota arrangement linked with provisions designed to control prices in the whole of the wire products trade in Canada with the result that competition was prevented, was held to be unlawful in *Dominion Supply Co.* vs. *T. L. Robertson Mfg. Co.* Here an association of manufacturers of wire products agreed to regulate prices and terms of sale of their products in respect of all sales in Canada for consumption in Canada for a period of five years. In addition, each member was allotted a proportion of the business in wire products in the Dominion and provision was made for payment to the association by each member of a sum based on the extent to which his business exceeded the proportion so allotted to him, such sum to be distributed among the members in proportion to their respective interests in the association. Clute J. concluded that the agreement constituted a violation of clauses (b) and (d) of Section 498 (1) of the Code.

The Legal Status of Corporate Combinations

The interposition of *a corporate structure in which combing associations participate* directly or indirectly is not a successful manner of evading Section 498 of the Criminal Code. So in *Rex* vs. *Container Materials Ltd. et al.* the Supreme Court of Canada dismissed appeals from the judgment of the Supreme Court of Ontario upholding appellants' convictions on charges laid under Section 498 (1) (d) of the Criminal Code. The court held that the convicted manufacturers did unlawfully conspire, combine, agree or arrange together and with one another and with ten other

named companies or individuals not indicted to unduly prevent or lessen competition in the production, manufacture, purchase, barter, sale, transportation or supply of corrugated and solid fibre board boxes or shipping containers. The associating eighteen convicted manufacturers controlled Container Materials Ltd. through representation on its board, and the one individual charged, the appellant Badden, was President, Secretary and virtual manager of the company. The marketing, sale, and supply to customers of the manufacturers were placed under the control of the company. The court held that although this scheme did not, strictly speaking, constitute a monopoly, it had all the effects of a monopoly as its purpose was to extinguish competition.

Blacklisting Illegal

Blacklisting is clearly an illegal practice. At different times and in different situations it has been held to run counter to one or several of the clauses in the relevant sections of the Code and the Combines Investigation Act.

In *Rex* vs. *Elliott,* a combination of dealers in coal agreed not to buy coal from any producer, miner, jobber or shipper who sold anthracite coal direct to a consumer in any town where there was a member of the association, or who sold to dealers who refused to maintain prices fixed by the local organization of coal dealers; and penalties were imposed for every sale made in violation of the rules. "Look-out lists" were published to warn shippers against selling to persons who were not regular dealers in coal according to the rules of eligibility of the association. Evidence was given to show that dealers in Ontario could not become members as of right, and that at least one application for membership had been refused on the ground that the state of the coal business would not admit of additional competition, and that dealers and shippers in Buffalo had refused to sell coal to dealers in Ontario who were not members of the association. The agreement was held to be illegal, as being in breach of Section 520 (1) (d) of the Criminal Code, 1892.

In *Rex* vs. *McMichael* an association of master plumbers entered into an arrangement with an association of dealers in goods required by plumbers and steamfitters whereby it was agreed that the members of the former association would purchase all their goods from members of the latter association, and that members of the latter association would not sell to the general public, and would sell to non-member plumbers and steamfitters only at an advance of 20% up on the prices quoted to members. It was held that the agreement constituted a violation of Section 498 of the Code inasmuch as it prevented the general public from purchasing plumbing supplies and greatly hampered plumbers who were not members of the association, and indeed tended to drive them out of business. Subsequently a new agreement was entered into which was intended absolutely to prevent and prohibit members of the supply as-

sociation from selling to any but members of the association, and in order to give effect to this agreement, monthly lists of persons to whom sales might be made were published and penalties were imposed for non-observance of the provisions of the agreement. This agreement also was held to violate the provisions of Section 498 of the Code since it unduly limited the facilities for supplying or dealing in plumbing supplies (articles or commodities which were properly the subject of trade or commerce), restrained or injured trade or commerce in relation thereto, unreasonably enhanced prices, and unduly prevented or lessened competition in their purchase, sale or supply.

Rex vs. *Clarke* was a prosecution resulting from the practices of the Alberta Retail Lumber Dealers' Association, which was organized for the purpose of ensuring the sale of lumber by manufacturers only to dealers who were members of the association, and to establish and maintain list prices. Uncooperative dealers were boycotted or expelled from the association, and could not otherwise obtain supplies. The court held that the agreement constituted a violation of Section 498 (1) (d) of the Code.

To summarize, the general principle might be stated that every agreement indicating discrimination of this sort (*i.e.* blacklisting) will be held illegal; and this would appear to be so whether the method adopted is the patent one involving the publication of a "stop-list", or whether the arrangement is camouflaged by means of provision for a preferential discount or by the organization of a "closed association."

The Businessman's Dilemma

In concluding this part of the discussion it should be pointed out that in many of the cases examined, it is practically impossible to extract the deciding factor or to ascertain the particular facts which led the court to the conclusion that the practices were unlawful, since in the final analysis it was the reaction of the court to the sum total of the evidence concerning the association under review which determined how the case should be decided. None of the cases turn on the validity of one particular device designed to accomplish the purpose of the parties; every one of them involves a number of devices. In other words, it is unsafe for businessmen to conclude that a particular trade arrangement is lawful simply because of a court decision that has upheld a similar arrangement. The whole purport of any trade association would have to be carefully examined before a considered judgment would be warranted upon the question of whether or not it constitutes a combine.

The writer is indebted to Mr. S. F. Sommerfeld for drawing his attention to the following apt quotation of a remark of the late Justice Brandeis of The Supreme Court of the United States in A. T. Mason's

"Brandeis — A Free Man's Life" (Viking Press, New York: 1946) at pages 352-3:

> " 'I think your lawyers or anyone else can tell you where a fairly safe course lies', Brandeis told one puzzled executive. 'If you are walking along a precipice no human being can tell you how near you can go to that precipice without falling over, because you may stumble on a loose stone, you may slip, and go over, but anybody can tell you where you can walk perfectly safely within convenient distance of that precipice'."

Generalizations Based on Case Law

There are, however, a number of *general propositions and interpretations deducible from the case law.* It is clear from the decision of the court in *Rex* vs. *Famous Players* that it is not necessary for the terms of the combine or conspiracy to be set out in black and white. The parties need not have actually put their heads together or have entered into a defined agreement, although it must appear from all the evidence that the combine or conspiracy alleged, did in fact exist between at least two of the accused. And there must have been a common design or plan to do the thing forbidden by statute, not resting upon intention merely, but reduced to a common undertaking to carry that intention into effect. Similarly, it is sufficient for the purpose of a criminal charge if the agreement or arrangement is designed to have the effect complained of; it need not have actually been put into operation or have been successful. This means, of course, that all of the by-laws of a trade association, or authority delegated to it, should be reviewed by the businessman who wishes to avoid the pitfalls of the combines legislation. It is not sufficient for him to concern himself only with the practices which his association actually employs. Should a particular association come under review by the Combines authorities or in the courts, the whole of its potential powers will come under examination.

The words "article or commodity" in Section 498 of the Criminal Code, and the word "commodity" in Section 2 of the Combines Investigation Act, have been given a very wide interpretation. Thus, it was held in *Rex* vs. *Singer* that the Combines Investigation Act applies to plumbing contracts, in which the materials furnished are attached to the building and thereby become real estate in contemplation of law. Again in *Rex* vs. *Famous Players,* the court came to the conclusion that although the supplying of films gives to the purchaser only a right to produce for a limited time the photographic reproductions of what is essentially a theatrical performance and is itself a subject of copyright, it is nevertheless a dealing in an article or commodity which may be the subject of trade or commerce under Section 498 of the Criminal Code.

It is clear from the terms of the statutes that *a corporation as well as an individual may be liable* under either the Code or the Combines Investiga-

tion Act. And under the latter statute any director or officer of a corporation who assents to or acquiesces in an offence under the Act, or fails to comply with an order of the Commissioner, is made personally liable for that offence; it was held in *Rex* vs. *McMichael* that where the conduct of an officer of a company that was a party to a combine amounted to more than acquiescence therein, and where he actively aided in bringing about the agreement, he was guilty of an offence against Section 498 of the Criminal Code as a principal, by virtue of the operation of Section 69 of the Criminal Code.

A trade union is excepted to some extent from the operation of both Section 498 of the Code, and the Combines Investigation Act. Section 498 (2) of the Code and Section 4 of the Combines Investigation Act are identical, and read as follows:

> Nothing in this section shall be construed to apply to combinations of workmen or employees for their own reasonable protection as such workmen or employees.

However, it has been held in *Rex* vs. *Singer,* that registration as a trade union under the Trade Unions Act will not save a combine from liability in respect of acts which greatly exceed the legitimate purposes and objects of a trade union. Conversely, it was held in *Lefebvre* vs. *Knott* that a combination of employers for the purpose of resisting the demands of a union for higher wages did not violate Section 520 of the Criminal Code, 1892.

It would appear that the case law interpreting the definition sections of the Combines Act and Section 498 of the Criminal Code is still in its infancy and, apart from the limited conclusions that have been drawn in the course of considering the cases that bear upon the interpretation of the definition sections, it is perhaps fair to say that business enterprise has as yet an inadequate body of precedent upon which to base the details of organization. In view of this uncertainty, and bearing in mind as well that the object of combines legislation is not so much to set up a legislative basis for prosecution as it is to act as a deterrent to the resort to unfair trade practices in business, it is submitted that consideration might well be given to the creation of a hiatus following the publication of the Commissioner's report and prior to the institution of a prosecution. Full advantage might then be taken of the sanction of public opinion which has its own curative and penalizing effect. If the trade practices that are condemned in the Commissioner's report are not corrected forthwith after the widest possible publicity has been given to the report, the prosecution should be proceeded with, but in this submission, not otherwise.

Combines Legislation and the Law of Contracts

Passing now to *the effect of the Canadian combines legislation on the law of contracts,* we begin with the proposition that a contract in restraint

of trade may be valid and binding at common law, as we have seen previously, providing the covenant in question can satisfy a double test of reasonableness: firstly, it must be "reasonable" in the interests of the parties, and secondly, it must be "reasonable" in the interests of the public. Judicial opinion tends to indicate that the former requisite is the more important one, and that the parties themselves are the best judges of what is "reasonable" between them. The common law doctrine of restraint of trade may still be invoked, in Canada, by anyone seeking to avoid a contractual obligation. A late Canadian case in which the common law rule has been applied is *Vancouver Malt and Sake Brewing Co.* vs. *Vancouver Breweries Ltd.*: in this case the double standard of "reasonableness" was reiterated in the Privy Council by Lord MacMillan.

However, by reason of the Combines Investigation Act and Section 498 of the Criminal Code, there is a further ground upon which a covenant may be unenforceable as in restraint of trade, and that is simply: *if it infringes either enactment, the contract or covenant will be unenforceable in a civil court.*

The introduction of combines legislation has brought with it a narrower interpretation of trade agreements. Many devices that would be quite valid under a common law interpretation, run foul of the courts because they infringe upon the Combines Investigation Act, or Section 498 of the Criminal Code. In particular, most of the reported cases which deal with price maintenance agreements indicate that such agreements are invalid as violating Section 498 of the Criminal Code. However, in this connection, it should be noted, as has been pointed out above, that few cases involving the single point of price fixing, without further complications such as restricting competition, have come before the courts in Canada.

In *Weidman & Co.* vs. *Shragge* it was held that a contract between dealers fixing prices to be paid by them for specified commodities, with the object of restricting competition and establishing a monopoly, constituted an agreement unduly to prevent or lessen competition under Section 498 of the Criminal Code, and was not enforceable between the parties.

In *Stearns* vs. *Avery* the court refused an injunction to restrain the defendant from selling goods of the plaintiff's manufacture except at prices mentioned in the agreement between them. It was found that the restrictions imposed by the vendor plaintiff were such as unreasonably to enhance the price to the purchasing public.

Combines Legislation and Liability for Injury

We now come to a consideration of *the effect on the law of torts of the Canadian combines legislation,* or, in other words, to a consideration of the extent to which an action will lie for damages as a result of injury due

to the operations of a combine in restraint of trade. The gist of the common law crime of conspiracy lies in the agreement. As it is not necessary in order to ground a criminal prosecution to allege an overt act in pursuance of the agreement, it is quite clear that an action in tort for conspiracy must be grounded upon an allegation of special damage arising out of the conspiracy; that is to say, in civil proceedings for a conspiracy, the plaintiff must be able to prove that he has suffered some particular injury by reason of an overt act done by the conspirators in pursuance of their agreement. Again, assuming that the plaintiff's allegation of special damage is proven, the injured party will recover damages civilly if the object of the comspiracy is to commit a tort or breach of contract or to injure the complainant. Here we see a distinction from the criminal law on the point since, in order to ground a successful prosecution for conspiracy, the object of the conspirators is the important consideration, and not the effect.

But under certain circumstances, what might otherwise constitute an actionable conspiracy may be excused. Thus, *where no intent to injure their competitors can be fixed upon the actors, and if the primary object of the agreement is to promote personal interests, the conspirators may set up the defence of "just cause or excuse."* In the words of Lord Summer:

> "There is no room for inquiring, whether their scheme was reasonable or whether their view of their interests was intelligent. They themselves will be the judges, for their mental state will determine the judgment. Apart from overt illegalities, the selfishness of their end will justify their actions and their means."

The common law rules with reference to the civil action for conspiracy, summarized above, apply in Canada as well as in England, although most of the case law upon the question is to be found in English reports. The rules relating to the defence of "just cause or excuse" that have received judicial interpretation in a long series of English cases culminating in *Sorrell* vs. *Smith* were applied by a Quebec court in *Tanguay* vs. *Laing.* It was held that where the real purpose of the combination (the Canadian Fire Underwriters' Association) is not to injure another, but to forward or defend the trade of those who enter into the combination, it is not unlawful at common law, and no action will lie even if damage ensues to another person. And in the earlier case of *Gibbins* vs. *Metcalfe,* it was held that the members of 'The Winnipeg Grain and Produce Exchange' were justified in agreeing not to sell or buy grain from the plaintiff, who had violated the rules of the Exchange, and that such an agreement was no more than a lawful exercise of the defendants' rights; the court found that, in the absence of any evidence of a malicious or improper motive, the combination and the pursuit of its objects did not affect any legal right of the plaintiff or operate to do him a legal injury. The still earlier case of *Canadian Pacific Navigation Co.*

vs. *Victoria Packing Co.* is authority for the general proposition that a combination tending directly to impede and interfere with the free course of trade and manufacture does not, without more, give rise to a right of action against the members of the combination at the instance of a trade competitor.

However, the further question arises in Canada of whether a combination to act in contravention of the Combines Investigation Act or Section 498 or 498A of the Criminal Code, will give rise to a civil action on the part of a person suing in tort and proving special damage as a result of the agreement and action taken in pursuance thereof.

In *Floyd* vs. *Edmonton City Dairy Limited et al.* the plaintiff carried on a retail ice cream business in "double-header" cones. Certain of the defendants, competitor retailers, were alleged to have induced the defendant company to enter into a combination to cut off the plaintiff's supply of ice cream. The action terminated in favour of the defendant. It was held that a violation of Section 498 of the Criminal Code, if it results in damage, is actionable at the suit of the person damnified, but that no action will lie if the real purpose of the combination is not to injure another but to forward or defend the trade advantages of those who enter into the agreement.

In *Transport Oil Ltd.* vs. *Imperial Oil Ltd.,* a decision in 1935, the plaintiff alleged that the defendants were operating a combine contrary to a number of sections of the Combines Investigation Act, by reason of which great loss and damage had been suffered by the plaintiff over and above the injury to the public generally. Upon motion in weekly court to determine the question of law raised, it was held that the allegation in the statement of claim did not confer any right of action on the plaintiff as against the defendant as "the Act does not in any way contemplate by implication, nor was it the intention of Parliament to confer any private right of action." This decision was upheld by the Ontario Court of Appeal. The Transport Oil case would appear to stand in the way of civil proceedings based specifically on the combines legislation, but, in view of the earlier cases which upheld such a right phrased in more general terms and based on the common law right to sue for injury arising out of a conspiracy, it is suggested that *liability still exists when the defendant cannot prove "just cause or excuse."*

So, in *Gordon* vs. *Imperial Tobacco Sales Co. of Canada Ltd.,* in denying the plaintiff a right of action for damages as a result of being affected by the operation of a combine, Mr. Justice McFarland followed the decision in the Transport Oil case pointing out that in a federal governmental system, Dominion legislation relating to crimes could not be construed as invading the provincial area of competence to the extent of creating a civil right of action. However, he quoted from the judg-

ment of Viscount Cave in *Sorrell* vs. *Smith,* a decision of the House of Lords, as follows:

> "A combination of two or more persons wilfully to injure a man in his trade is unlawful and if it results in damage to him, is actionable. If the real purpose of the combination is not to injure another but to forward or to defend the trade of those who enter it, then no wrong is committed and no action will lie although damage to another ensues."

McFarland J. therefore accepted the proposition that the motive actuating the combination is the determining consideration and to be actionable the combine must have acted wilfully and unduly for the purpose of injuring a man in his trade. Here the plaintiff failed because the real purpose of the combination was to forward or defend the trade of those who had entered into it. Consequently, the plaintiff, a tobacco retailer who sued among others the Ontario Tobacco Distributors' Association and its secretary for damages for blacklisting, failed in his action and the interim injunction that had been granted in the action was dissolved.

Conclusion

By way of conclusion, attention is drawn to the present thinking of the government on the subject of Combines legislation, which would appear to be somewhat uncertain at the moment. Perhaps, due to a feeling in the Cabinet that it would not carry the support of public opinion, Mr. McGregor's contention for a strong enforcement policy was not supported. However, the matter of future government policy is by no means closed, as may be witnessed by the appointment by the Minister of Justice of The Committee to Study the Canadian Combines Legislation, and its terms of reference: "To study, in the light of present day conditions, the purposes and methods of the Combines Investigation Act and related Canadian statutes and the legislation and procedures of other countries, in so far as the latter appear likely to afford assistance, and to recommend what amendments, if any, should be made to our Canadian legislation in order to make it a more effective instrument for the encouraging and safeguarding of our free economy." It would seem then that we have reached a point in the development of the Law of Combines in Canada when public opinion, or more specifically, associations of manufacturers, consumers and other interested groups, should express themselves by addressing their representations to the Honourable Mr. Justice J. H. McQuarrie, the Chairman of the Committee, Justice Building, Ottawa.

The Evolution of Social Security

Odin W. Anderson
Associate Professor, Faculty of Medicine
University of Western Ontario

Following a brief discussion of the "why" and "what" of social security, Dr. Anderson traces the evolution of social security programs from the man-made insecurities inherent in our modern industrial society.

IN A HIGHLY volatile and interdependent modern industrial economy the individual families are frequently the victims of unpredictable economic catastrophes over which they have little or no personal control unless they are able to pool their resources and spread their economic risks.

The key problem faced by families in a modern economy is the continuity of income and maintenance of family financial solvency in the face of five well-defined contingencies. At any given moment families can suffer serious loss of income for the following reasons: (1) unemployment due to lack of work; (2) unemployment due to disability; (3) old age and retirement—risk of living too long and having no retirement income; (4) premature death—risk of not living long enough and leaving dependents in distress; (5) costs of medical care.

Maintenance of the Continuity of Income

All five of these contingencies revolve around the central fact of continuity of income and maintenance of family financial solvency. Short of an extremely high income it must be admitted that it is almost impossible for an individual family to save enough money by itself to tide it over a protracted or even a short period of unemployment; to save for old age and retirement; to put aside a lump sum early during the working career of the breadwinner for his dependents if he dies prematurely; and to accumulate a sum of money to pay for unpredictable costs of medical care.

Customarily one saves for goods and services he knows he will want, like an automobile, a refrigerator, a house, clothing, and so on. The costs of these items are known in advance, but the amount of savings needed for unemployment, retirement, premature death, and costs of medical care cannot be predicted in advance. Consequently the risk elements in a family economy have to be cushioned by various types of insurance, be they private or governmental; the point is that both require group action.

During the past 400 years in the Western World concepts of social and individual responsibility for family economic risks have undergone a gradual evolution.

Modern Concepts of Social Security

The evolution of concepts of public welfare programs has been one of a shift from the concepts of public assistance or poor relief to the concepts of social insurance or social security. The differences between these two approaches are profound and far reaching. The public assistance approach was the sole approach to public welfare until the latter part of the nineteenth century.

Public assistance is characterized as follows:

1. Destitution or near destitution of the applicant.
2. Means test to determine eligibility.
3. Applicant receives benefit as a privilege not as a right.
4. Supported from general taxation; beneficiary has not contributed directly.
5. Benefits not to exceed a subsistence standard of living.

The social insurance approach began to emerge at the turn of the century and has probably reached its fullest expression in Great Britain. Social insurance is characterized as follows:

1. Destitution irrelevant to the problem of whether or not the worker receives benefits.
2. Worker receives benefits as a right according to statute in the face of certain contingencies with amount of benefits, length of benefits, and amount of contribution prescribed in advance; *i.e.,* the worker knows where he stands.
3. Generally the worker contributes at least in part to the maintenance of a reserve fund to cover the contingency in question.
4. Means test is eliminated.
5. Participation by given segments of the working population is compulsory.

The concepts of public assistance and social insurance are existing side by side in present-day Canada and it appears that gradually the social insurance concept will be the dominant one. Following is a rough classification of public assistance and social insurance programs administered by the Federal, Provincial, and Municipal governments today.

Public Assistance: Unemployment Relief; Mothers' Allowances; Old Age Pensions; Aid to the Blind; War Veterans' Allowances; Medical and Hospital Care.

Social Insurance: Unemployment Insurance; Workmen's Compensation; Family Allowances; Hospital Care in British Columbia and Saskatchewan; Dominion Government Annuities.

There may be some doubt about placing Family Allowances under either of the two headings because it is primarily an income spreading device for the benefit of the family, but all families with children receive benefits as a matter of right and for our present purpose it may be well to leave the program under *Social Insurance.*

A final general concept of modern social security is that no one should fall below a certain level of living. As to what that level should be is at best ill-defined at the present time, but it is important to emphasize that modern social security does not envision "handouts" of a luxury nature or even of a modest comfort nature. At best it is assumed that the level below which no one should fall is not far above subsistence. Social insurance is supposed to supplement one's own efforts. No social security system yet devised, even in Great Britain, provides a good level of living.

Every society and every age has had implicit in it the assumption that no one should fall below a certain minimum. The level of that minimum has varied from country to country and from age to age, but the principle of a minimum has existed. In this connection it is certain that the controversy in Canada today is not over the *principle* of social insurance (the means test is in universally bad repute regarding old age pensions) but over the amount of benefits, scope of coverage, and division of labour between private and public agencies.

Personal Economic Risks in the Evolution of Modern Industrial Society

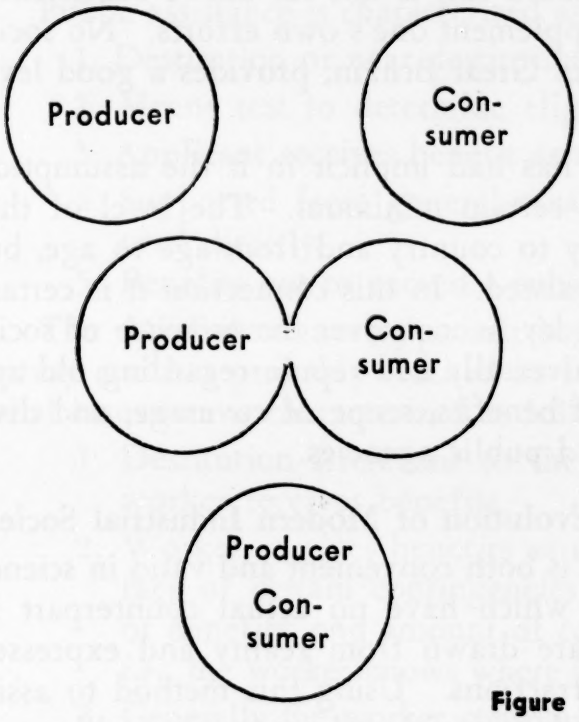
For the purpose of analysis it is both convenient and valid in science to establish imaginary situations which have no actual counterpart in reality, but which, nevertheless, are drawn from reality and expressed as averages, types, and other abstractions. Using this method to assist us in an understanding of our modern social and economic problems, it may be useful to construct two types of societies — the rural-handicraft and the urban-industrial — and note the differences between them and how the Industrial Revolution caused the shift from one type to the other. Within each type will be discussed (1) the social organization as found in the immediate community and the family, (2) the economic organization as revealed by methods of production and distribution and the resulting standard of consumption, and (3) the organization of mutual aid or social welfare.

The Rural-Handicraft Economy

In the rural-handicraft economy there was hardly any differentiation between the three areas listed except for a few trades and professions which were relatively undeveloped. Transportation and communication facilities were generally lacking, and those that did exist were slow and cumbersome. The chief sources of power were human and animal muscle, charcoal, and an occasional windmill and waterwheel. The

population tended to be stable in terms of both mobility and numbers, and the lack of contact between communities made them self-contained units of production and consumption. The family was the key unit of production. Finished products were fashioned from raw materials often grown or produced by the family itself. The relationship between the producer and consumer was direct and simple. In fact, the producer and consumer were frequently one and the same individual. Figure 1 illustrates the producer-consumer relationships.

THE RELATIONSHIPS BETWEEN THE PRODUCER AND CONSUMER IN A RURAL-HANDICRAFT ECONOMY



1. Some products where there was complete separation of producer and consumer but no middleman.

2. Some products where both producer and consumer were also part consumer and part producer.

3. Some products where consumer produced everything he consumed or vice versa.

Figure 1

The tie with the land was close and direct. Only a small proportion of the population was not engaged in agriculture. Three individuals on the land were needed to feed themselves and one other individual not engaged directly in agriculture. Figure 2 shows the proportion of people living on the land to those in other pursuits. The heavy bottom line denotes the total arable land base.

Also, in the rural handicraft economy the population that could be supported on a reasonable level of living as measured by contemporary standards can be assumed to be about 100 per square mile judging from present-day figures yielded by low-density agricultural areas.

Because of the close tie to the land a rural-handicraft economy did not undergo violent booms and depressions. The fluctuations were narrow within a relatively limited (as measured by modern standards) range and volume of goods and services. And, although the level of living was low compared with modern standards, there was assurance,

THE PROPORTION OF THE POPULATION LIVING ON THE LAND TO THOSE OFF THE LAND IN A RURAL-HANDICRAFT ECONOMY

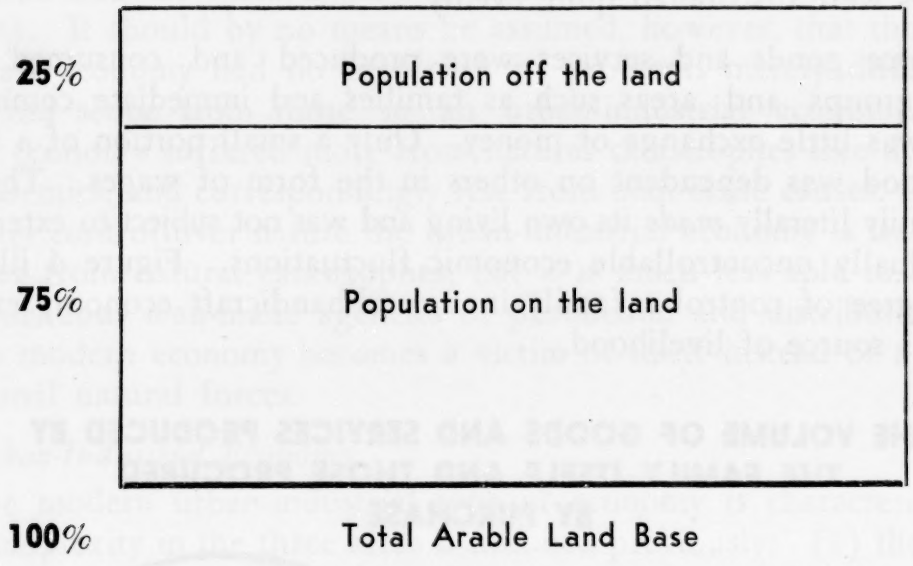


Figure 2

barring natural catastrophes, that goods and services would be produced and consumed on a stable level. Figure 3 is an attempt to illustrate the hypothetical economic fluctuations within the existing range and volume of goods and services. Three arbitrary levels of living are presented and the rise and fall in the levels of living as determined by economic conditions are indicated.

THE RANGE OF FLUCTUATIONS IN THE ECONOMIC CYCLES OF A RURAL-HANDICRAFT ECONOMY

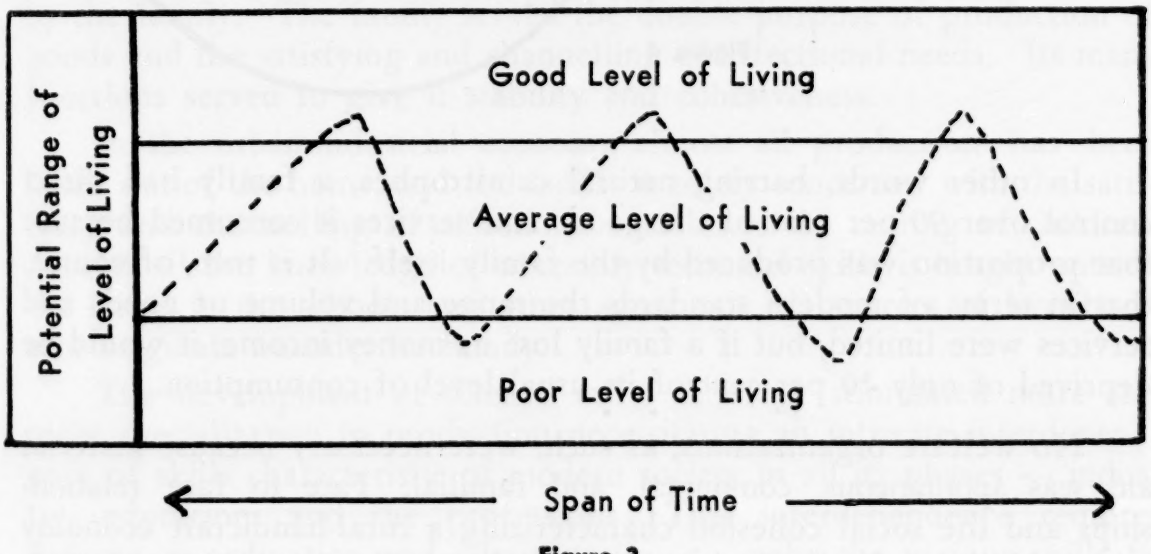


Figure 3

Another characteristic of the rural-handicraft economy was the close correlation between the capacity to produce and the capacity to consume.

Overproduction and underconsumption of the existing goods and services were non-existent in the modern sense, and, also, the disparity between levels of living among groups was small. The existing goods and services were distributed quite evenly.

Since goods and services were produced and consumed within small groups and areas such as families and immediate communities there was little exchange of money. Only a small portion of a family's livelihood was dependent on others in the form of wages. Therefore, the family literally *made* its own living and was not subject to external and individually uncontrollable economic fluctuations. Figure 4 illustrates the degree of control a family in a rural-handicraft economy exercised over its source of livelihood.

THE VOLUME OF GOODS AND SERVICES PRODUCED BY THE FAMILY ITSELF AND THOSE PROCURED BY PURCHASE

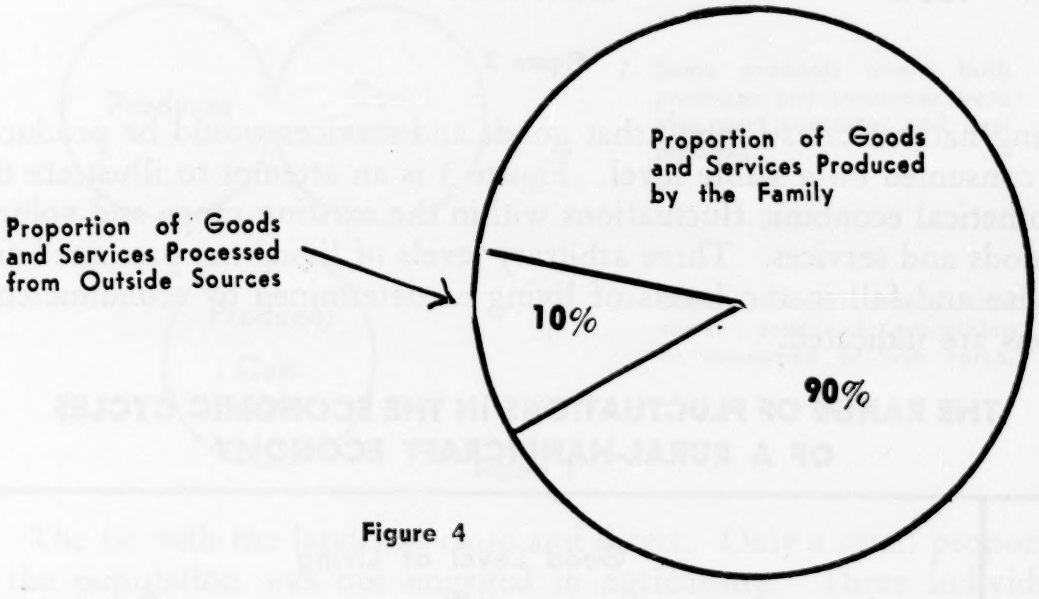

Proportion of Goods and Services Produced by the Family
Proportion of Goods and Services Processed from Outside Sources
10%
90%

Figure 4

In other words, barring natural catastrophes, a family had direct control over 90 per cent of the goods and services it consumed because that proportion was produced by the family itself. It is true, of course, that in terms of modern standards the range and volume of goods and services were limited, but if a family lost its money income, it would be deprived of only 10 per cent of its usual level of consumption.

No welfare organizations, as such, were necessary because material aid was spontaneous, communal, and familial. Face to face relationships and the social cohesion characterizing a rural-handicraft economy mitigated the sufferings of individuals from misfortunes out of their personal control. The large and cohesive family unit of the day which extended much farther than the immediate unit of father-mother-children

looked after its orphans and aged, and neighbors helped each other in times of stress.

With the exploitation of new services of power came the Industrial Revolution and the urban-industrial type of economy and its attendant problems. It should by no means be assumed, however, that the rural-handicraft economy had no problems; its problems merely differed in nature and scope from those in an urban-industrial economy. The simpler economy suffered more from natural catastrophes like droughts and epidemics, and correspondingly less from man-made causes. Because of greater control over nature the urban-industrial economy is less likely to suffer from natural catastrophes, but it is much less able to control the tremendous man-made agencies of production and distribution. In short, a modern economy becomes a victim of itself instead of a victim of external natural forces.

The Urban-Industrial Economy

The modern urban-industrial type of economy is characterized by great complexity in the three areas mentioned previously: (1) the social organization as found in the immediate community and family, (2) the economic organization as revealed by methods of production, distribution, and standards of consumption, and (3) the organization of social welfare services.

The sciences and the arts of a given period are interrelated with the methods of making a living and determine the levels of living. The methods and organization of production in turn are interrelated with the social organization. As an example, in the rural-handicraft economy the family was the chief economic unit. It was the unit of production as well as the unit in which children were born and reared. Practically all the knowledge of necessary skills was transmitted to each generation by the family. The family served the double purpose of production of goods and the satisfying and channelling of affectional needs. Its many functions served to give it stability and cohesiveness.

In the urban-industrial economy almost all production has been taken out of the home, and the family is solely concerned with the satisfying and channelling of affectional needs and the rearing of children. Almost all the knowledge of necessary technical skills is taught outside the home in the schools and other agencies. All sources of livelihood also originate outside the family.

The development of science and technology stimulated more and more specialization in production necessitating an intricate interdependence of skills characteristic of modern society in all its phases — industry, education, and the professions. This interdependence requires delicate co-ordination and administration to make the various skills fit into efficient functioning and producing units. Therefore, greater and greater areas and population groups become economically interdepend-

THE RELATIONSHIP BETWEEN PRODUCER AND CONSUMER IN AN URBAN-INDUSTRIAL ECONOMY

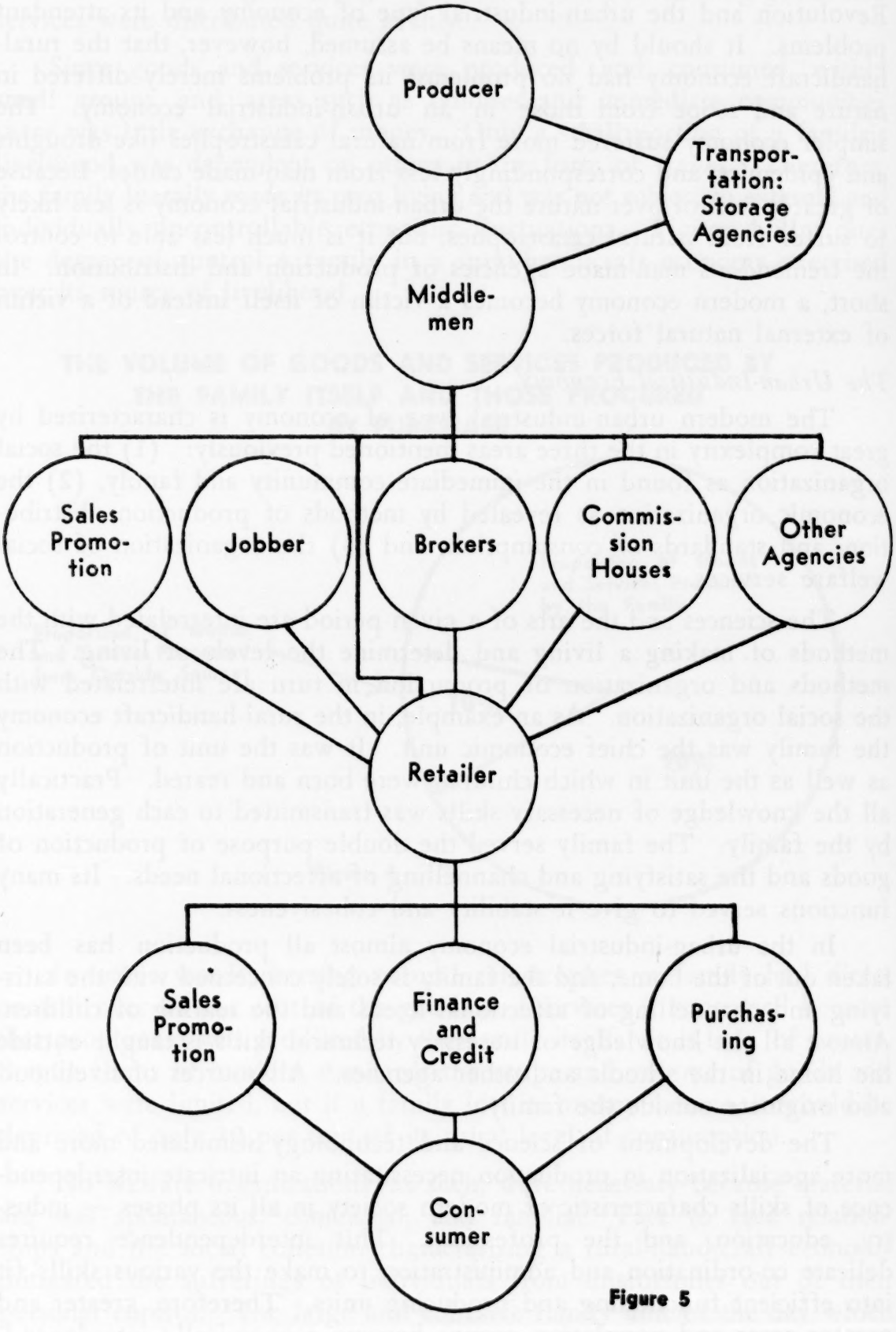


Figure 5

ent. Witness an automobile manufacturing plant which requires everything from iron and steel to woolen upholstery, for which raw material must be procured from all parts of the globe. The parts must mesh or the assembly line, the point of convergence, will not move.

Not only is there specialization of skills in individual human beings in the modern economic system; even regions take on dominant characteristics differentiating them from each other. Minneapolis and its hinterland becomes the flour producing centre; Chicago and its hinterland the meat packing centre; Detroit the automobile manufacturing centre, and so on. They must all mesh or our economy stagnates. A graphic illustration of interdependence was given by a strike of a few hundred tugboat operators in New York harbor. This small and specialized group in a city of seven million tied up half the daily food supply for New York City.

In the urban-industrial economy the relationship between the producer and consumer is indirect; many functions intervene before a product eventually reaches the consumer. This is illustrated in Figure 5.

In such a system the families and the communities are no longer self-contained units of production and consumption. Instead they are invisibly but inexorably tied together by webs of relationships extending over large areas. The consumer sees only the finished product. He has not seen the original raw material from which the product was fashioned nor the numerous hands through which it passed in the production process. Therefore agencies of experts must determine and enforce standards since the consumer is no longer capable of doing so.

Although the tie with the land is fundamental in both the rural-handicraft and urban-industrial economies, increasing technical knowledge in the latter has led to greater productivity per acre and per man so that fewer men on the land can feed more people. A visual impression of the proportion of people dependent directly on the land and those engaged in other pursuits is gained from Figure 6.

Reference to Figure 2 will show the contrast to the rural-handicraft economy. One individual on the land can now produce enough food for himself and three others off the land. The population which can be supported per square mile on a reasonably good standard of living now can exceed 1,000.

Thus is seen the superstructure of specialization and increased goods and services which a small land base can support in an urban-industrial economy. But this has its consequences. In contrast to the rural-handicraft economy whose economic fluctuations were narrow within the existing limited range of goods and services, the fluctuations in an urban-industrial economy operating at maximum efficiency are tremendous and a good standard of living is within reach of almost everyone. But when such an economy collapses, widespread destitution results. The poten-

THE PROPORTION OF POPULATION LIVING ON THE LAND TO THAT OFF THE LAND IN AN URBAN-INDUSTRIAL ECONOMY

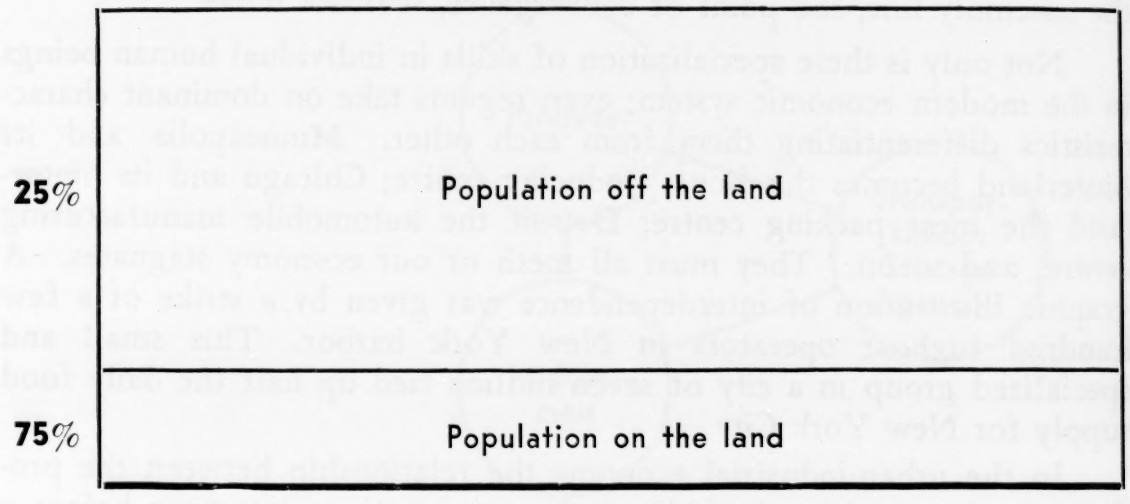


Figure 6

tialities in either direction are much greater than in a rural-handicraft economy. Figure 7 shows the economic fluctuations in an urban-industrial economy. It should be compared with Figure 3.

THE RANGE OF FLUCTUATIONS IN THE ECONOMIC CYCLES OF AN URBAN-INDUSTRIAL ECONOMY

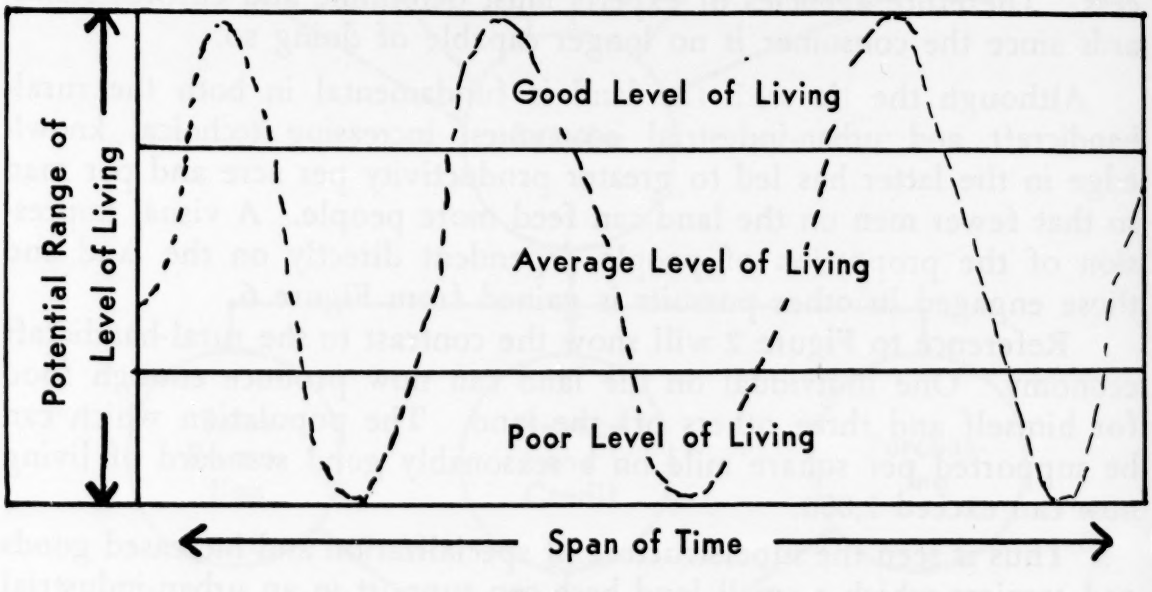


Figure 7

It is suggested that when an urban-industrial economy is operating efficiently people can enjoy a higher standard of living than those in a rural-handicraft economy even dreamed of. Conversely, when an urban-industrial economy collapses people are worse off than those in a depression cycle in a rural-handicraft economy. Thus in an urban-industrial

economy there is greater insecurity within a vast range of goods and services.

Directly related to this condition are the great discrepancies in an urban-industrial economy between the potential and actual productive capacities, and between the potential and actual levels of consumption. It will be recalled that in a rural-handicraft economy the potential and actual levels of production and consumption were relatively equal.

Rarely, and then only in time of war, has an urban-industrial economy produced to capacity. It usually produces to capacity in terms of effective demand as measured by purchasing power, but not in terms of potential consumption as measured by standards of adequate consumption. Standards of consumption are always relative to the production potential of a given economic system. In the rural- handicraft economy the standard of consumption was lower — it had to be — but relative to potential production it was higher than in a modern economy because the earlier economy was functioning to the limits of its productive capacity almost constantly.

In an urban-industrial economy all goods and services are produced outside the home, necessitating a money and wage system. The entire source of a family's livelihood is dependent on an impersonal and highly interdependent economic system. The family is *earning* its living and not *making* it as was true in a rural-handicraft economy where the family was largely its own unit of production and consumption and unemployment was unknown. As indicated earlier, sickness and old age were absorbed by the larger family unit and the immediate community.

Conclusion

It is hoped that this presentation has demonstrated that a modern industrial economy has inherent in it conditions which have given rise to various types of social security programs. It is also hoped that a suggestive answer has been provided people who believe that ours is an age of a "search for security" in contrast to our rugged pioneer forefathers who were in "search of opportunity". In all probability the desire for economic security has been relatively constant from generation to generation, but in the course of our economic development, insecurity for the individual family has increased and found its expression in deliberate and organized social security programs to replace the former well-knit larger family unit and village and rural type of economy.

Current Books and Articles

THE STRUCTURE OF AMERICAN INDUSTRY. By Walter Adams. New York: The Macmillan Company; 1950. 578 pp.

The searching analysis of an industry is a fascinating undertaking, and to students of Business Administration, especially those taking courses in Business Policy (a study of management problems at top executive level) such studies as those included in "The Structure of American Industry" are extremely valuable. Granted that a wealth of material is available to any student wishing to extend himself sufficiently in good libraries to satisfactorily inform himself in this area; a careful reading of an industry study in this book will greatly simplify the undertaking. In addition, the student will have some thought-provoking author comments to consider.

The author has set himself a difficult task in that he has attempted to have each contributor follow generally a certain pattern in developing his analysis. In this he has largely succeeded. Each study is kept well within bounds in such matters as length, inclusion of statistics, etc., and by and large, each chapter is most readable. As the author states, the book "is not directed at the professional grandstand, but rather at the sizeable body of intelligent citizens — students and laymen alike — who take interest in the important problems of industrial organization and price policy."

This reviewer particularly enjoyed Corwin Edwards' "Public Policy in a Free Enterprise Economy" and Charles Killingsworth's "Organized Labor in a Free Enterprise Economy". The former appealed as an especially fitting summation of broad business policy as it emerges from a study of a varied group of basic American industries. Businessmen may well ponder such statements as, "It follows that success in keeping private enterprise from being absorbed by the state depends in large part upon success in keeping business competitive." —L. W. SIPHERD

GOVERNMENT AND BUSINESS. By Vernon A. Mund. Harper and Bros., New York: 1950. 643 pp.

There is a growing recognition in the Schools of Business Administration of the need for a better understanding on the part of the graduates of the ever-increasing impact which government legislation has on business. This is partly the result of the fact that in the past fifteen or twenty years we have witnessed a substantial increase in the number of regulations which affect the daily operation of business enterprises, and businessmen, though somewhat reluctant to accept many of these changes, are realizing more and more that government intervention in

certain areas is wholly warranted. As the author puts it, "Although capitalism is not usually considered to involve a plan, its maintenance and effective operation actually require a great deal of government intervention."

Vernon Mund's *Government and Business* will serve as an excellent reference work so far as the American legislative system is concerned. It brings the reader up-to-date, with particular emphasis on the subject of monopolistic practices. The author covers most thoroughly the problem of the regulation of pricing in business, a field in which there is a special need for a clearer understanding. Reference to so many actual examples of alleged violations of sound business practice is especially helpful in clarifying just what the government is trying to accomplish: the author is to be commended for covering so much ground without making the text too heavy. Generous references to more specialized reading in specific fields are placed at the end of each chapter for those who wish to make a more exhaustive study of the particular subjects.

As the author explains, *Government and Business* is not written to "give its readers a personal philosophy". It is primarily factual but nevertheless useful for any instructor attempting to cover in a course the subject of executive responsibility in the realm of community relations. A very important part of the task of developing in students a sense of business trusteeship is the clear understanding of what is taking place in the realm of government regulation of business activity. This book is a complete survey of developments in the United States from which Canadian students can draw considerable profit.

—L. W. SIPHERD

EXECUTIVE ACTION. By Edmund D. Learned, David N. Ulrich and Donald R. Booz. Division of Research, Graduate School of Business Admistration, Harvard University, Boston: 1951. xiv, 218 pp.

Executive Action is the result of two years' research at the Harvard Business School under the leadership of Edmund Learned. The study started out as an examination of the human aspects of staff-line relationships. Early in the field work the group found a much heavier interest in broad executive relationships and the work was extended to include the more comprehensive area. The survey covered an intensive study of twelve companies in all parts of the United States. While this cannot be regarded as a sound statistical sample, this reviewer is satisfied with the extra penetration made possible by the examination of a smaller number of companies.

The authors do not forget the obvious working pressures of today's executive. They realize that the demands on the executive's time to keep

abreast with day-to-day operating problems are enormous. In the early part of the book numerous executive action situations are analyzed to show how human relations are involved in getting things done. These case situations show clearly how operating problems and human problems are related and how failure to handle the latter situations may well result in total failure.

A listing of major chapter headings will indicate the scope and nature of the work. They are: Working Pressure on Executives; Human Background of Executive Action; The Role of a Top Executive; The Top Executive as an Individual; The Process of Delegation; Communication; Control and Measurement; Use of Organization Charts and Manuals; Executive Use of Staff Organizations, and Building an Organization.

It is not easy to highlight this book. The flavor of the work is reflected in some of the mature observations of the authors. On the subject of "Staff Relations", the authors say: "We found that when an executive trained subordinates in the habit of concentrating upon solutions of their mutual problems rather than on jurisdictions many existing frictions disappeared . . . Ideally, he tries to show subordinates how they can fulfill their personal aspirations by working in co-operative group activity". On "Building an Organization" we find: "The concept of the leader as one who helps an organization to do is in fact vastly broader in scope than the concept of the leader as one who holds the helm alone". A comment by the authors on "Control and Measurement" is illuminating: "The way in which an executive uses the clues furnished by control reports, the skill he employs in obtaining supplementary knowledge, the freedom of discussion and explanation which he permits, and his own capacity to hear bad news without violent reaction are among the factors that promote effective contacts and fruitful use of control data by subordinates".

Other revealing statements found in the book are: . . . "we found that in many companies executives could have put a great deal more faith in the capacity of subordinates to assume greater responsibility" . . . "we . . . offer the hypothesis that any administrative unit should be small enough to permit the executive or supervisor in charge of it to engage in frequent face-to-face contact with its members", and . . . "the greatest expansion in resources that may take place in industry in coming decades may well be the effective release of human talents and energies . . .".

Executive Action will disappoint the man who is looking for "gadgets" in handling his job. On the other hand the man who is genuinely interested in meeting the challenge that administrative work presents will find much that is useful. Learned, Ulrich and Booz have written a book that should be required reading for all who must get things done by working with people. —WALTER A. THOMPSON

HOW TO USE MARKET RESEARCH FOR PROFIT. By Willard M. Fox. Prentice-Hall, Inc., New York: 1950. 362 pp.

Directed to the user of market research, rather than the researcher, this book fills a substantial gap in the literature. The scope is well-defined in the preface: "If you read it from cover to cover, you won't know any more about how to *do* market research than you know right now. . . . It is to help you, as a business man, to know what sound market research *is* and to help you decide when and how to use market research to increase net profits." This purpose is achieved.

The author (who directs Remington Rand's market research) brings a background in various aspects of market research and uses it effectively. He highlights the possibilities and pitfalls in a wide range of research areas — *e.g.* sales control records, consumer preferences, sales forecasting — and his points of emphasis are worth the careful study of both the buyers and sellers of market research. This reviewer's major reservation about the book is the impression that it is too highly personalized. More explicit reference to findings other than those of the author — competent though he is — would have been desirable. It is, nevertheless, a highly useful book for its audience. —EDWARD J. FOX

RETAIL CREDIT MANUAL. By J. Gordon Dakins, Credit Management Division, National Retail Dry Goods Association. 100 W. 31st St., N.Y.C.: 1950. 620 pp.

This is a comprehensive and competent handbook. It should be of real value to junior members of the credit department, for classroom use as a text or reference, and particular chapters (such as those on "Analyzing the Credit Risk" and "Accepting and Declining Applications") will be reviewed with gain by senior credit department personnel.

The text is practical, rather than theoretical, in its orientation presumably reflecting the wide experience of Mr. Dakins and the contributors, many of whom have substantial stature in the retail credit field. Readers will welcome the straightforward style and the excellence of the typography and lay-out. —EDWARD J. FOX

CANADIAN SECRETARIAL PRACTICE. By the Chartered Institute of Secretaries. Sir Isaac Pitman & Sons (Canada) Limited, Toronto: 1950. 309 pp.

Written primarily as a textbook for the benefit of the increasing number of students proceeding to the professional degree of "Chartered Secretary," this book should also fill the need for a manual on the various duties of a company secretary based on Canadian company law and practice.

As stated in the preface the contents of the book may be summarized under three main headings; namely:

(a) The procedure and administration of companies registered under the Companies Acts from their promotion to their dissolution, with special attention to the work of the secretary.

(b) The law and conduct of and procedure at meetings in general and more particularly at company meetings.

(c) The principles of office organization and business management insofar as they affect the work of the secretary.

Most of the text is devoted to the subject material included under the first two of these headings. Frequent references are made to the Dominion and Quebec Companies Acts and in addition a number of important legal decisions are mentioned. The inclusion of a glossary of terms and of specimen company forms adds much to this part of the text material. The amount of space given over to the subject of office organization and practice provides for little more than an introduction to that subject, but in a book of this kind this would appear to be sufficient.

A good index is supplied as is also a short but adequate bibliography. The student reader will be helped by the test questions contained in one of the appendices. —JAMES C. TAYLOR

ADVANCED ACCOUNTING, VOLUME II. By George Hillis Newlove, Ph.D., C.P.A., and S. Paul Garner, Ph.D., C.P.A.: D. C. Heath and Company, Boston: 1950, 418 pp.

This book is designed to give intensive coverage to a few selected subjects and therefore is aimed at the intermediate or graduate accountant. The contents have been divided into four parts; namely: 1) reorganizations; 2) bankruptcies; 3) fiduciaries and; 4) partnerships. These are given a lengthy treatment providing the intermediate student with an excellent groundwork and the graduate reader with an excellent review. A great deal of emphasis has been placed on accounting for fiduciary relationships; therefore, a considerable amount of American statutory and judicial information and references has been included. However, since accounting principles are practically the same in both the United States and Canada, the book should lose little of its value to the Canadian reader.

Each topic discussed is amply illustrated by examples. At the end of many of the chapters appear illustrative problems and solutions which are valuable in that they offer the ambitious student an opportunity to test his knowledge. A companion volume of problems has been published separately under the title, *Advanced Accounting Problems,*

Book II. Some of these problems, according to the authors, are adapted from recent C.P.A. examinations. —GEORGE W. HARRIGAN

WESTERN UNION IN CRISIS: ECONOMIC ANARCHY OR POLITICAL UNION. By R. W. G. Mackay. Basil Blackwell, Oxford: 1950. 120 pp.

Mr. Mackay, a delegate to the Consultative Assembly of the Council of Europe, has written a series of five papers attempting to define the problems facing the Assembly. The author's conclusion, that there must be a United States of Europe if the economic problems of Western Europe are to be solved, is particularly interesting in view of a recent British Socialist fostered decision, by the Assembly, to proceed slowly and by means of intergovernmental specialized agencies.

The first paper is an attempt to delineate the economic problems of Western Europe and to summarize what the author believes are the important features of a number of reports such as those of the Committee of European Economic Co-operation. It is Mr. Mackay's view that these reports clearly show the necessity of integrating the European economy.

Once this conclusion has been reached, the second paper is an examination of the adequacy of existing organizations for economic co-operation. Here the conclusion is that, ". . . if the European Recovery Program is to mean anything in saving Europe, it must mean the creation of a political authority in Western Europe with a power over currency and customs . . .".

Mr. Mackay next discusses the type of unity required. There are two possible approaches, one functional and the other federal. Both seek an ultimate union, but the federal solution, which is favoured, places the political aspect before the economic.

The last two papers discuss the difficulties of creating a federal system and urge the necessity of action now. Since these papers were written just previous to the first meeting of the Consultative Assembly, Mr. Mackay presents, in conclusion, some positive recommendations or resolutions for the consideration of the Assembly.

—D. H. MacALLAN

Stopette Upsets Seasonal Sales With Fall Deordorant Promotion. (SALES MANAGEMENT, November 20, 1950.)

This short article points up the success of an all-out campaign to break a buying habit. William A. Wright, vice-president and general sales manager of Jules Montier Inc., describes the technique which his company used to change people's deodorant buying habits. An $800,000

campaign employing television, business paper advertising, newspape space, retail outlet assistance, and a contest produced fantastic results All this promotion was based on the discovery of the sebacious glan which works to produce BO both winter and summer. Other companie had been stressing the prevention of BO only in hot summer months Mr. Wright's campaign made the public conscious of offending the yea round. —J. McISAA

Preparing For Price Control. (THE MANAGEMENT REVIEW — AM ERICAN MANAGEMENT ASSOCIATION, November, 1950.)

This article suggests that with the possibility of price controls an a developing seller's market, now is the time to review sales policies Several recommendations are offered to ensure that pricing is geared t current conditions.

1. Review prices against current replacement costs on an item b item basis.
2. Give special attention to mark-up on each individual item.
3. Watch out for temporary price cuts.
4. Review your policy on quantity and package prices.
5. Watch your policy on freight charges.
6. Review your discount practices.
7. Review your policy on free service, maintenance or other pro motional inducements. —D. H. MacALLA

The Ten Priceless Principles Of Effective Advertising Copy. By D. E. Rob inson, Vice-President, Price, Robinson and Frank Inc. (PRINTER'S INK Dec. 22, 1950.)

Mr. Robinson says, "Copy testing over the years has given us thes fundamental approaches that we know will work."

1. Write your advertising from the reader's point of view.
2. Take full advantage of any strong emotional appeals.
3. Be sure your advertising has psychological sequence—*i.e.* develop from attention — to interest — to conviction — to action.
4. Make your copy look easy to read.
5. Make your copy sincere — believable — convincing.
6. Build your copy around interesting people.
7. Base your copy upon news.
8. Concentrate on one main theme.
9. Sum up your sales story somewhere.
10. Give your copy high publiciy value — *i.e.* make clear, even t the casual observer, what is being advertised and what the im portant sales message is. —D. H. MacALLA